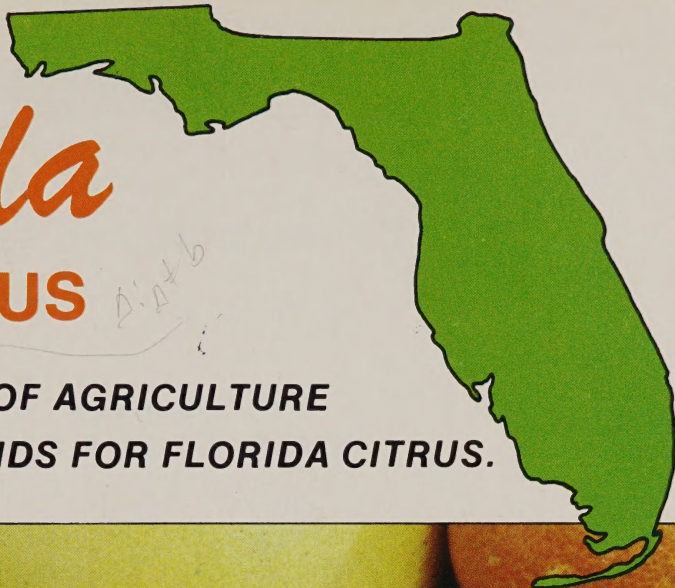


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Florida

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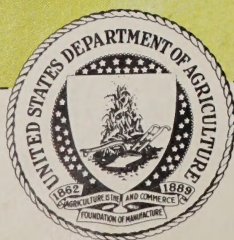
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Florida Department of Agriculture and Consumer Services
in cooperation with
U.S. Department of Agriculture
Agricultural Marketing Service
Fruit and Vegetable Division

U.S.D.A. VISUAL AID CIT-(FL)-L-I February '73
THE JOHN HENRY COMPANY
P. O. BOX 1410 LANSING, MICH. 48904

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**UNITED STATES STANDARDS
FOR GRADES OF
FLORIDA ORANGES
AND TANGELOS**

EFFECTIVE OCTOBER 15, 1967
AS AMENDED FEBRUARY 13, 1968 AND JANUARY 31, 1973



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
WASHINGTON, D.C.

UNITED STATES STANDARDS FOR GRADES OF FLORIDA ORANGES AND TANGELOS¹

Effective October 15, 1967
(32 F. R. 13492)

As amended February 13, 1968 (33 F. R. 2883)
and January 31, 1973 (37 F. R. 26417)

Sec.	GENERAL
51.1140	General.
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51.1142	U.S. No. 1 Bright.
51.1143	U.S. No. 1.
51.1144	U.S. No. 1 Golden.
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51.1175	Classification of defects.
	STANDARDS FOR INTERNAL QUALITY OF COMMON SWEET ORANGES (CITRUS SINENSIS (L) OSBECK)
51.1176	U.S. Grade AA Juice (Double A).
51.1177	U.S. Grade A Juice.
51.1178	Maximum anhydrous citric acid permissible for corresponding to- tal soluble solids.

51.1179 Method of juice extraction.

VISUAL AID

51.1180 Visual Aid.

AUTHORITY: The provisions of this subpart issued under secs. 203, 205, 60 Stat. 1087, as amended, 1090 as amended; 7 U.S.C. 1622, 1624.

GENERAL

§ 51.1140 General.

The standards contained in this subpart apply only to the common or sweet orange group and varieties and hybrids of varieties belonging to the Mandarin group, except tangerines, and to the citrus fruit commonly known as "tangelo"—a hybrid between tangerine or mandarin orange (*Citrus reticulata*) with either the grapefruit or pomelo (*C. paradisi* and *C. grandis*). Separate U.S. Standards apply to tangerines. The standards for internal quality contained in §§ 51.1176 through 51.1179 apply only to common sweet oranges (*Citrus sinensis* (L) Osbeck).

GRADES

§ 51.1141 U.S. Fancy.

"U.S. Fancy" consists of oranges which meet the following requirements:

(a) Basic requirements:

(1) Discoloration:

(b) Not more than one-tenth of the surface, in the aggregate, may be affected by discoloration. (See § 51.1162.)

(2) Firm;

(3) Mature;

(4) Similar varietal characteristics;

(5) Smooth texture;

(6) Well colored; and,

(7) Well formed.

(b) Free from:

(1) Ammoniation;

(2) Bruises;

(3) Buckskin;

(4) Caked melanose;

(5) Creasing;

(6) Cuts not healed;

(7) Decay;

(8) Growth cracks;

(9) Scab;

(10) Split navels;

(11) Sprayburn;

(12) Undeveloped segments; and,

(13) Wormy fruit.

¹ Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act or with applicable State laws and regulations.

(c) Free from injury caused by:

- (1) Green spots;
 - (2) Oil spots;
 - (3) Rough, wide or protruding navels;
 - (4) Scale;
 - (5) Scars;
 - (6) Skin breakdown; and,
 - (7) Thorn scratches.
- (d) Free from damage caused by:
- (1) Dirt or other foreign material;
 - (2) Disease;
 - (3) Dryness or mushy condition;
 - (4) Hail;
 - (5) Insects;
 - (6) Riciness or woodiness;
 - (7) Sunburn; and,
 - (8) Other means.
- (e) For tolerances see § 51.1152.
- (f) Internal quality:

(1) Lots meeting the internal requirements for "U.S. Grade AA Juice (Double A)" or "U.S. Grade A Juice" may be so specified in connection with the grade. (See §§ 51.1176-51.1179.)

§ 51.1142 U.S. No. 1 Bright.

The requirements for this grade are the same as for U.S. No. 1 except that no fruit may have more than one-fifth of its surface, in the aggregate, affected by discoloration.

(a) For tolerances see § 51.1152.

(b) Internal quality:

(1) Lots meeting the internal requirements for "U.S. Grade AA Juice (Double A)" or "U.S. Grade A Juice" may be so specified in connection with the grade. (See §§ 51.1176-51.1179.)

§ 51.1143 U.S. No. 1.

"U.S. No. 1" consists of oranges which meet the following requirements:

(a) Basic requirements:

(1) Color:

(i) Early and midseason varieties shall be fairly well colored.

(ii) For Valencia and other late varieties, not less than 50 percent, by count, shall be fairly well colored and the remainder reasonably well colored.

(2) Discoloration:

(i) Not more than one-third of the surface, in the aggregate, may be affected by discoloration. (See § 51.1162.)

(3) Fairly smooth texture;

(4) Firm;

(5) Mature;

(6) Similar varietal characteristics; and,

(7) Well formed.

(b) Free from:

(1) Cuts not healed;

(2) Bruises;

(3) Decay;

(4) Growth cracks; and,

(5) Wormy fruit.

(c) Free from damage caused by:

(1) Ammoniation;

(2) Buckskin;

(3) Caked melanose;

(4) Creasing;

(5) Dirt or other foreign material;

(6) Disease;

(7) Dryness or mushy condition;

(8) Green spots;

(9) Hail;

(10) Insects;

(11) Oil spots;

(12) Riciness or woodiness;

(13) Scab;

(14) Scale;

(15) Scars;

(16) Skin breakdown;

(17) Split, rough or protruding navels;

(18) Sprayburn;

(19) Sunburn;

(20) Thorn scratches; and,

(21) Other means.

(d) For tolerances see § 51.1152.

(e) Internal quality:

(1) Lots meeting the internal requirements for "U.S. Grade AA Juice (Double A)" or "U.S. Grade A Juice" may be so specified in connection with the grade. (See §§ 51.1176-51.1179.)

§ 51.1144 U.S. No. 1 Golden.

The requirements for this grade are the same as for U.S. No. 1 except that not more than the number of fruits permitted in § 51.1152, Tables I and II, shall have more than one-third of their surface, in the aggregate, affected by discoloration.

(a) For tolerances see § 51.1152.

(b) Internal quality:

(1) Lots meeting the internal requirements for "U.S. Grade AA Juice (Double A)" or "U.S. Grade A Juice" may be so specified in connection with the grade. (See §§ 51.1176-51.1179.)

§ 51.1145 U.S. No. 1 Bronze.

The requirements for this grade are the same as for U.S. No. 1 except that all fruit must show some discoloration. Not less than the number of fruits required in § 51.1152, Tables I and II, shall have more than one-third of their surface, in the aggregate, affected by discoloration. The predominating discoloration on these fruits shall be of rust mite type.

(a) For tolerances see § 51.1152.

(b) Internal quality:

(1) Lots meeting the internal requirements for "U.S. Grade AA Juice (Double A)" or "U.S. Grade A Juice" may be so specified in connection with the grade. (See §§ 51.1176-51.1179.)

§ 51.1146 U.S. No. 1 Russet.

The requirements for this grade are the same as for U.S. No. 1 except that not less than the number of fruits required in § 51.1152, Tables I and II, shall have more than one-third of their surface, in the aggregate, affected by any type of discoloration.

(a) For tolerances see § 51.1152.

(b) Internal quality:

(1) Lots meeting the internal requirements for "U.S. Grade AA Juice (Double A)" or "U.S. Grade A Juice" may be so specified in connection with the grade. (See §§ 51.1176-51.1179.)

§ 51.1147 U.S. No. 2 Bright.

The requirements for this grade are the same as for U.S. No. 2 except that no fruit may have more than one-fifth of its surface, in the aggregate, affected by discoloration.

(a) For tolerances see § 51.1152.

(b) Internal quality:

(1) Lots meeting the internal requirements for "U.S. Grade AA Juice (Double A)" or "U.S. Grade A Juice" may be so specified in connection with the grade. (See §§ 51.1176-51.1179.)

§ 51.1148 U.S. No. 2.

"U.S. No. 2" consists of oranges which meet the following requirements:

(a) Basic requirements:

(1) Discoloration:

(1) Not more than one-half of the surface, in the aggregate, may be affected by discoloration. (See § 51.1162.)

(2) Fairly firm;

(3) Mature;

(4) Reasonably well colored;

(5) Similar varietal characteristics;

(6) Not more than slightly misshapen; and,

(7) Not more than slightly rough texture.

(b) Free from:

(1) Bruises;

(2) Cuts not healed;

(3) Decay;

(4) Growth cracks; and,

(5) Wormy fruit.

(c) Free from serious damage caused by:

(1) Ammoniation;

(2) Buckskin;

(3) Caked melanose;

(4) Creasing;

(5) Dirt or other foreign material;

(6) Disease;

(7) Dryness or mushy condition;

(8) Green spots;

(9) Hail;

(10) Insects;

(11) Oil spots;

(12) Riciness or woodiness;

(13) Scab;

(14) Scale;

(15) Scars;

(16) Skin breakdown;

(17) Split, rough or protruding navels;

(18) Sprayburn;

(19) Sunburn;

(20) Thorn scratches; and,

(21) Other means.

(d) For tolerances see § 51.1152.

(e) Internal quality:

(1) Lots meeting the internal requirements for "U.S. Grade AA Juice (Double A)" or "U.S. Grade A Juice" may be so specified in connection with the grade. (See §§ 51.1176-51.1179.)

§ 51.1149 U.S. No. 2 Russet.

The requirements for this grade are the same as for U.S. No. 2 except that not less than the number of fruits required in § 51.1152, Tables I and II, shall have more than one-half of their surface, in the aggregate, affected by discoloration.

(a) For tolerances see § 51.1152.

(b) Internal quality:

(1) Lots meeting the internal requirements for "U.S. Grade AA Juice (Double A)" or "U.S. Grade A Juice" may be so specified in connection with the grade. (See §§ 51.1176-51.1179.)

§ 51.1150 U.S. No. 3.

"U.S. No. 3" consists of oranges which meet the following requirements:

(a) Basic requirements:

(1) Mature;

(2) Misshapen;

(3) Poorly colored:

(1) Not more than 25 percent of the surface may be of a solid dark green color.

(4) Rough texture, not seriously lumpy;

(5) Similar varietal characteristics;

and,

(6) Slightly spongy.

(b) Free from:

(1) Cuts not healed;

(2) Decay; and,

(3) Wormy fruit.

(c) Free from very serious damage caused by:

(1) Ammoniation;

(2) Bruises;

(3) Buckskin;

(4) Caked melanose;

(5) Creasing;

(6) Disease;

(7) Dryness or mushy condition;

(8) Growth cracks;

- (9) Hail;
- (10) Insects;
- (11) Riciness or woodiness;
- (12) Scab;
- (13) Scale;
- (14) Scars;
- (15) Skin breakdown;
- (16) Split navels;
- (17) Sprayburn;
- (18) Sunburn; and,
- (19) Other means.
- (d) For tolerances see § 51.1152.
- (e) Internal quality:

(1) Lots meeting the internal requirements for "U.S. Grade AA Juice (Double A)" or "U.S. Grade A Juice" may be so specified in connection with the grade. (See §§ 51.1176-51.1179.)

UNCLASSIFIED

§ 51.1151 Unclassified.

"Unclassified" consists of oranges which have not been classified in accordance with any of the foregoing grades. The term "unclassified" is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

TOLERANCES

§ 51.1152 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, based on sample inspection, the number of defective or off-size specimens in the individual sample, and the number of defective or off-size specimens in the lot, shall be within the limitations specified in Tables I and II. No tolerance shall apply to wormy fruit.

TABLE I—SHIPPING POINT !
(a) FOR 1 THROUGH 20 SAMPLES

Factor	Grades	AL	Number of 50-count samples *																			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
			Acceptance numbers * (maximum permitted)																			
Decay-----	U.S. Fancy U.S. No. 1 U.S. No. 2-----	1	0	1	1	1	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5
	U.S. No. 3-----		0	1	2	2	3	3	4	4	4	4	5	5	6	6	6	6	6	7	7	7
Very serious damage including decay.	U.S. Fancy U.S. No. 1 U.S. No. 2-----	5	4	6	9	11	14	16	18	20	22	24	26	28	30	35	37	39	41	43	45	45
	All-----		8	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90
Total defects including decay and very serious damage.	All-----	10	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
	Off-size-----		7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
	U.S. No. 1 U.S. No. 1 Bright. U.S. No. 2 U.S. No. 2 Bright.	10	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
	U.S. No. 1 Golden.		22	18	34	40	64	80	93	109	122	138	151	166	180	194	208	222	237	251	265	279
Discoloration-----	U.S. No. 1 Bronze. U.S. No. 1 Russet.	11	15	32	51	69	88	106	125	144	162	182	201	220	240	259	278	297	317	336	355	374
	U.S. No. 2 Russet.		1	3	8	12	18	23	29	34	40	45	51	56	62	68	74	79	85	91	97	102

Factor	Grades	A.L. ¹	Number of 50-count samples ³															
			21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
			Acceptance numbers ⁴ (maximum permitted)															
Decay-----	U.S. Fancy-----	1	5	6	6	6	6	6	6	7	7	7	7	7	7	8	8	8
	U.S. No. 1-----																	
	U.S. No. 2-----																	
Very serious damage including decay.	U.S. No. 3-----	2	8	8	8	8	9	9	9	9	10	10	10	11	11	11	11	12
	U.S. Fancy-----	6																
	U.S. No. 1-----		47	49	51	53	54	56	58	60	62	64	66	68	70	72	74	76
Total defects including decay and very serious damage.	U.S. No. 2-----																	
	All-----	8	98	103	107	111	116	120	124	129	133	137	141	146	150	154	159	163
Off-size-----		10	98	103	107	111	116	120	124	129	133	137	141	146	150	154	159	163
Discoloration-----	U.S. No. 1-----	10																
	U.S. No. 1 Bright.																	
	U.S. No. 2-----		98	103	107	111	116	120	124	129	133	137	141	146	150	154	159	163
	U.S. No. 2 Bright.	22																
	U.S. No. 1 Golden.		307	321	335	349	363	377	391	405	419	433	447	461	475	489	503	517
		11																
	U.S. No. 1 Bronze.			413	433	452	471	491	510	530	549	569	588	608	627	647	666	686
	U.S. No. 1 Russet.																	
	U.S. No. 2 Russet.	1	114	119	125	131	137	143	149	155	161	166	172	178	184	190	196	202

¹ Shipping point, as used in these standards, means the point of origin of the shipment in the production of the product or at port of loading for ship stores or overseas shipments, or in the case of shipments from outside the continental United States, the port of entry into the United States.

² A.L.—Absolute limit permitted in individual 50-count sample.

³ Sample size—50 count.

⁴ Acceptance number—Maximum or minimum number of defective or off-size fruit permitted.

⁵ Preferred number of samples for this acceptance number.

TABLE II.—EN ROUTE OR AT DESTINATION

Factor	Grades	AL ¹	Number of 50-count samples ²															
			Acceptance numbers ² (maximum permitted)															
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Decay	All.	4	3	4	6	7	9	10	11	13	14	15	16	18	19	20	21	23
Very serious damage other than decay.	U.S. Fancy U.S. No. 1. U.S. No. 2.	6	4	6	9	11	14	16	18	20	22	24	26	28	30	33	35	37
Total defects including very serious damage other than decay.	All.	8	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76
Off-size		10	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76
Discoloration	U.S. No. 1. U.S. No. 1 Bright. U.S. No. 2. U.S. No. 2 Bright.	10	7	11	17	22	27	32	36	41	45	50	54	59	63	68	72	76
	U.S. No. 1 Golden.	22	18	34	49	64	80	93	109	122	138	151	166	180	194	208	222	237
	U.S. No. 1 Bronze. U.S. No. 1 Russet.	11	15	32	51	69	88	106	125	144	162	182	201	220	240	259	278	297
	U.S. No. 2 Russet.	1	3	8	12	18	23	29	34	40	45	51	56	62	68	74	79	85

¹ AL—Absolute limit permitted in individual 50-count sample.² Sample size—50 count.³ Acceptance number—maximum or minimum number of defective or off-size fruit permitted.

STANDARD PACK

§ 51.1153 Standard pack.

(a) Fruit shall be fairly uniform in size and shall be place packed in boxes or cartons and arranged according to the approved and recognized methods and shall meet the applicable size requirements set forth in this section.

(b) All containers shall be tightly packed and well filled but the contents shall not show excessive or unnecessary bruising because of overfilled containers.

(c) When packed in half-standard $\frac{1}{2}$ -bushel nailed boxes or $1\frac{1}{2}$ -bushel wire-bound boxes, the bulge of any box shall not exceed $1\frac{1}{4}$ inches; when packed in $\frac{1}{2}$ -bushel wire-bound boxes including the $\frac{1}{2}$ -bushel flat wire-bound boxes, the bulge of any box shall not exceed 1 inch; when packed in telescope cartons, the bottom of each telescope cover, when in place, shall not be more than $\frac{3}{4}$ inch above the bottom of the carton container and each container shall be at least level full at time of packing.

(d) Fruit in each container shall meet the size, count, minimum diameter, and pack arrangement given in one of the following tables for the various types of fruit and sizes of containers:

TABLE III

(When oranges, including navel, are packed in $1\frac{1}{2}$ bushel wire-bound box)

Size and count	Pack	Rows	Layers	Minimum diameter in inches
100's-----	4 x 4----- or 5 x 5-----	5	5	3 $\frac{1}{16}$
125's-----	5 x 5-----	5	5	3 $\frac{1}{16}$
163's-----	7 x 6-----	5	5	2 $\frac{13}{16}$
200's-----	8 x 8-----	5	5	2 $\frac{1}{16}$
252's-----	7 x 7-----	5	5	2 $\frac{3}{16}$
324's-----	9 x 9-----	6	6	2 $\frac{1}{16}$

Provided, That when Navel oranges are packed in this container, the sizes and minimum diameter may be as follows:

Size and count	Minimum diameter in inches
96's-----	3 $\frac{1}{16}$
125's or 128's-----	3 $\frac{1}{16}$
150's-----	3
175's or 176's-----	2 $\frac{13}{16}$
216's-----	2 $\frac{1}{16}$
252's-----	2 $\frac{3}{16}$
288's or 294's-----	2 $\frac{1}{16}$
324's-----	2 $\frac{1}{16}$

TABLE IV

(When Temple oranges and Tangelos are packed in $\frac{1}{2}$ bushel flat wire-bound box)

Size and count	Pack	Rows	Layers	Minimum diameter in inches
54's-----	4 x 5-----	4	3	3 $\frac{1}{16}$
66's-----	6 x 5-----	4	3	3 $\frac{1}{16}$
80's-----	4 x 4-----	5	4	3
100's-----	5 x 5-----	5	4	2 $\frac{13}{16}$
120's-----	5 x 5-----	6	4	2 $\frac{3}{16}$
156's-----	7 x 6-----	6	4	2 $\frac{3}{16}$

Provided, That when Murcott honey oranges are packed in this container, or in $\frac{1}{2}$ -bushel nailed box, or $\frac{1}{2}$ -bushel wire-bound box, or $\frac{1}{2}$ -bushel fiberboard carton, the sizes, packs, and minimum diameters shall be as follows:

Size and count	Pack	Rows	Layers	Minimum diameter in inches
100's-----	5 x 5-----	5	5	2 $\frac{15}{16}$
120's-----	4 x 4-----	5	6	2 $\frac{1}{16}$
150's-----	5 x 5-----	5	6	2 $\frac{3}{16}$
176's-----	5 x 6-----	5	6	2 $\frac{1}{16}$
210's-----	5 x 5-----	6	7	2 $\frac{1}{16}$
246's-----	6 x 6-----	6	7	2 $\frac{3}{16}$
294's-----	7 x 7-----	6	7	2

TABLE V

(When oranges, Temple oranges, Navel oranges and Tangelos are packed in $\frac{4}{5}$ bushel wire-bound box and $\frac{4}{5}$ bushel fiberboard carton)

Size	Count	Pack	Rows	Layers	Minimum diameter in inches
100's-----	48----- or 50-----	3 x 3-----	4	4	3 $\frac{1}{16}$
125's-----	64----- or 80-----	4 x 4----- 5 x 5-----	4	4	3 $\frac{1}{16}$ 2 $\frac{13}{16}$
163's-----	80----- or 100-----	4 x 4----- 5 x 5-----	4	5	2 $\frac{15}{16}$ 2 $\frac{1}{16}$
200's-----	100----- or 125-----	4 x 4----- 5 x 5-----	5	5	2 $\frac{1}{16}$ 2 $\frac{3}{16}$
252's-----	125----- or 163-----	5 x 5----- 7 x 6-----	5	5	2 $\frac{3}{16}$ 2 $\frac{1}{16}$
324's-----	163----- or 163-----	5 x 4-----	6	6	2 $\frac{1}{16}$

Provided, That when Navel oranges are packed in these containers, the size, pack, count, and minimum diameter may be as follows:

Size	Count	Pack	Rows	Layers	Minimum diameter in inches
96's-----	48	3 x 3-----	4	4	3 $\frac{1}{16}$
125's or 126's-----	64	4 x 4-----	4	4	3 $\frac{1}{16}$
150's-----	72	5 x 4-----	4	5	3
175's or 176's-----	88	4 x 3-----	5	5	2 $\frac{13}{16}$
216's-----	112	4 x 5-----	5	5	2 $\frac{1}{16}$
252's-----	125	5 x 5-----	5	5	2 $\frac{3}{16}$
288's-----	150	6 x 6-----	5	5	2 $\frac{1}{16}$
324's-----	162	6 x 7-----	5	5	2 $\frac{1}{16}$

(e) "Fairly uniform in size", as applied to oranges packed in containers as set forth in paragraph (d) of this section, means that not more than the number of fruits permitted in § 51.1152, Tables I and II, are below the minimum diameters given for the various packs and vary more than the following amounts:

Size	Diameter range in inches
100's and 125's-----	$\frac{1}{16}$
163's and 200's-----	$\frac{1}{8}$
252's and 324's-----	$\frac{1}{4}$

(f) In order to allow for variations incident to proper packing, not more than 5 percent of the containers in any lot may fail to meet the requirements of standard pack.

STANDARD SIZING

§ 51.1154 Standard sizing.

(a) Boxes, cartons, bag packs, or bulk loads in which oranges are not packed according to a definite pattern do not meet the requirements of standard pack, but may be certified as meeting the requirements of standard sizing: *Provided*, That the oranges are fairly uniform in size as defined in this section: *And provided further*, That when packed in boxes or cartons the contents have been properly shaken down and the container is at least level full at time of packing.

(b) "Fairly uniform in size" as applied to oranges packed as set forth in paragraph (a) of this section, means that not more than the number of fruits permitted in § 51.1152, Tables I and II, are outside the range of diameters given for the following pack sizes:

Size	Diameter in inches	
	Minimum	Maximum
100's-----	$3\frac{1}{16}$	$3\frac{1}{2}$
125's-----	$3\frac{1}{8}$	$3\frac{3}{8}$
163's-----	$2\frac{1}{4}$	$3\frac{1}{4}$
200's-----	$2\frac{1}{2}$	3
252's-----	$2\frac{3}{4}$	$2\frac{1}{2}$
324's-----	$2\frac{1}{2}$	$2\frac{3}{4}$

(c) When oranges are packed in containers, in order to allow for variations incident to proper packing, not more than 5 percent of the containers in any lot may fail to meet the requirements of standard sizing.

DEFINITIONS

§ 51.1155 Similar varietal characteristics.

"Similar varietal characteristics"

means that the fruits in any container are similar in color and shape.

§ 51.1156 Well colored.

"Well colored" means that the fruit is yellow or orange in color with practically no trace of green color.

§ 51.1157 Firm.

"Firm" as applied to common oranges and tangelos means that the fruit is not soft, or noticeably wilted or flabby; as applied to oranges of the Mandarin group (Satsumas, King, Mandarin), "firm" means that the fruit is not extremely puffy, although the skin may be slightly loose.

§ 51.1158 Well formed.

"Well formed" means that the fruit has the shape characteristic of the variety.

§ 51.1159 Mature.

(a) "Mature" for other than Temple oranges shall have the same meaning currently assigned that term in sections 601.19 and 601.20 of the Florida Citrus Code of 1949, as amended (ch. 25149, Laws of Florida, 1949), or as the definition of such term may hereafter be amended;

(b) "Mature" for Temple oranges shall have the same meaning currently assigned that term in sections 601.21 and 601.22 of the Florida Citrus Code of 1949, as amended (ch. 26492, Laws of Florida, 1951), or as the definition of such term may hereafter be amended; and,

(c) "Mature" for Tangelos shall have the same meaning currently assigned that term in sections 601.231 and 601.232 of the Florida Citrus Code of 1949, as amended (ch. 29757, Laws of Florida, 1955), or as the definition of such term may hereafter be amended.

§ 51.1160 Smooth texture.

"Smooth Texture" means that the skin is thin and smooth for the variety and size of the fruit.

§ 51.1161 Injury.

"Injury" means any specific defect described in § 51.1175, Table VI; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which slightly detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.1162 Discoloration.

"Discoloration" means russetting of a light shade of golden brown caused by rust mite or other means. Lighter shades of discoloration caused by superficial scars or other means may be allowed on a greater area, or darker shades may be allowed on a lesser area, provided no discoloration caused by speck type melanose or other means may detract from the appearance of the fruit to a greater extent than the shade and amount of discoloration allowed for the grade.

§ 51.1163 Fairly smooth texture.

"Fairly smooth texture" means that the skin is fairly thin and not coarse for the variety and size of the fruit.

§ 51.1164 Damage.

"Damage" means any specific defect described in § 51.1175, Table VI; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.1165 Fairly well colored.

"Fairly well colored" means that, except for an aggregate area of green color which does not exceed the area of a circle 1 inch in diameter, the yellow or orange color predominates over the green color.

§ 51.1166 Reasonably well colored.

"Reasonably well colored" means that the yellow or orange color predominates over the green color on at least two-thirds of the fruit surface, in the aggregate.

§ 51.1167 Fairly firm.

"Fairly firm" as applied to common oranges and tangelos, means that the fruit may be slightly soft, but not bruised; as applied to oranges of the Mandarin group (Satsumas, King, Mandarin), means that the skin of the fruit is not extremely puffy or extremely loose.

§ 51.1168 Slightly misshapen.

"Slightly misshapen" means that the fruit is not of the shape characteristic of the variety but is not appreciably elongated or pointed or otherwise deformed.

§ 51.1169 Slightly rough texture.

"Slightly rough texture" means that the skin is not of smooth texture but is not materially ridged, grooved, or wrinkled.

§ 51.1170 Serious damage.

"Serious damage" means any specific defect described in § 51.1175, Table VI; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.1171 Misshapen.

"Misshapen" means that the fruit is decidedly elongated, pointed or flat-sided.

§ 51.1172 Slightly spongy.

"Slightly spongy" means that the fruit is puffy or slightly wilted but not flabby.

§ 51.1173 Very serious damage.

"Very serious damage" means any specific defect described in § 51.1175, Table VI; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which very seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.1174 Diameter.

"Diameter" means the greatest dimension measured at right angles to a line from stem to blossom end.

51.1175 Classification of defects.

TABLE VI

Factor	Injury	Damage	Serious damage	Very serious damage
Ammoniation.....		Not occurring as light speck type.	Scars are cracked or dark and aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.
Buckskin.....		Aggregating more than a circle 1 inch in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.	Aggregating more than 50 percent of the surface.
Caked melanose.....		Aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 200 size orange.	Aggregating more than a circle $\frac{1}{2}$ inch in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.
Creasing.....		Materially weakens the skin, or extends over more than one-third of the surface.	Seriously weakens the skin, or extends over more than one-half of the surface.	Very seriously weakens the skin, or is distributed over practically the entire surface.
Dryness or mushy condition.		Affecting all segments more than $\frac{1}{4}$ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than $\frac{1}{4}$ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than $\frac{1}{4}$ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.
Green spots.....	More than slightly affecting appearance.	More than 10 spots caused by scale, each spot equivalent to the area of a circle $\frac{1}{8}$ inch in diameter on a 200 size orange.	More than 25 spots caused by scale, each spot equivalent to the area of a circle $\frac{1}{8}$ inch in diameter on a 200 size orange.	
Hall.....	Not well healed, or aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 200 size orange.	Not well healed, or aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 200 size orange.	Not well healed, or aggregating more than a circle $\frac{1}{2}$ inch in diameter on a 200 size orange.	Not well healed, or aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 200 size orange.
Oil spots.....	More than slightly affecting appearance.	More than 5 spots, or aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 200 size orange.	More than 10 spots, or aggregating more than a circle 1 inch in diameter on a 200 size orange.	
Scab.....		Materially detracts from the shape or texture, or aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 200 size orange.	Seriously detracts from the shape or texture, or aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.
Scale.....	More than a few adjacent to the "button" at the stem end, or more than 6 scattered on other portions of the fruit.	Aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 200 size orange.	Aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.
Scars.....	Depressed, not smooth, or detracts from appearance more than the amount of discoloration permitted in the grade.	Deep, not smooth, or shallow or fairly shallow and detracts from appearance more than the amount of discoloration permitted in the grade.	Very deep, fairly smooth, or detracts from appearance more than the amount of discoloration permitted in the grade.	Deep, rough or unsightly that appearance is very seriously affected.
Skin breakdown.....		Aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 200 size orange.	Aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.
Sprayburn.....		Aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 200 size orange.	Hard and aggregating more than a circle $1\frac{1}{2}$ inches in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.

TABLE VI—Continued

Factor	Injury	Damage	Serious damage	Very serious damage
Sunburn.....	-----	Skin is flattened, dry, darkened, or hard and the affected area exceeds 25 percent of the surface.	Skin is hard and affects more than one-third of the surface.	Aggregating more than 50 percent of the surface.
Split, Rough, Protruding Navels.	Split is unhealed, or more than $\frac{1}{4}$ inch in length, or navel protrudes beyond the general contour, and opening is so wide, folded and ridged that it detracts from appearance.	Split is unhealed, or more than $\frac{1}{4}$ inch in length, or more than three well healed splits, or navel protrudes beyond the general contour, and opening is so wide, folded and ridged that it detracts from appearance.	Split is unhealed, or more than $\frac{1}{2}$ inch in length, or two or more splits aggregate more than 1 inch in length, or navel protrudes beyond general contour, and opening is so wide, folded and ridged that it detracts from appearance.	Split is unhealed or fruit is seriously weakened.
Thorn scratches...	Not well healed, or more unsightly than discoloration permitted in the grade.	Not well healed, or hard concentrated thorn injury aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 200 size orange.	Not well healed, or hard concentrated thorn injury aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 200 size orange.	Aggregating more than 25 percent of the surface.

**STANDARDS FOR INTERNAL QUALITY OF
COMMON SWEET ORANGES (CITRUS
SINENSIS (L) OSBECK)**

§ 51.1176 U.S. Grade AA Juice (Double A).

Any lot of oranges, the juice content of which meets the following requirements, may be designated "U.S. Grade AA Juice (Double A)":

(a) Each lot of fruit shall contain an average of not less than 5 gallons of juice per standard packed box of 1 $\frac{3}{8}$ bushels.

(b) The average juice content for any lot of fruit shall have not less than 10 percent total soluble solids, and not less than one-half of 1 percent anhydrous citric acid, or more than the permissible maximum acid specified in Table VII of § 51.1178.

§ 51.1177 U.S. Grade A Juice.

Any lot of oranges, the juice content of which meets the following requirements, may be designated "U.S. Grade A Juice":

(a) Each lot of fruit shall contain an average of not less than 4 $\frac{1}{2}$ gallons of juice per standard packed box of 1 $\frac{3}{8}$ bushels.

(b) The average juice content for any lot of fruit shall have not less than 9 percent total soluble solids, and not less than one-half of 1 percent anhydrous citric acid, or more than the permissible maximum acid specified in Table VII of § 51.1178.

§ 51.1178 Maximum anhydrous citric acid permissible for corresponding total soluble solids.

For determining the grade of juice, the maximum permissible anhydrous citric acid content in relation to corresponding total soluble solids in the fruit is set forth in the following Table VII together with the minimum ratio of total soluble solids to anhydrous citric acid:

TABLE VII

Total soluble solids (average percent)	Maximum anhydrous citric acid (average percent)	Minimum ratio of total soluble solids to anhydrous citric acid
9.0.....	0.947	9.50-1
9.1.....	.963	9.45-1
9.2.....	.979	9.40-1
9.3.....	.995	9.35-1
9.4.....	1.011	9.30-1
9.5.....	1.027	9.25-1
9.6.....	1.043	9.20-1
9.7.....	1.060	9.15-1
9.8.....	1.077	9.10-1
9.9.....	1.094	9.05-1
10.0.....	1.111	9.00-1
10.1.....	1.128	8.95-1
10.2.....	1.146	8.90-1
10.3.....	1.164	8.85-1
10.4.....	1.182	8.80-1
10.5.....	1.200	8.75-1
10.6.....	1.218	8.70-1
10.7.....	1.237	8.65-1
10.8.....	1.256	8.60-1
10.9.....	1.275	8.55-1
11.0.....	1.294	8.50-1
11.1.....	1.306	8.50-1
11.2.....	1.318	8.50-1
11.3.....	1.329	8.50-1
11.4.....	1.341	8.50-1
11.5.....	1.353	8.50-1
11.6.....	1.365	8.50-1
11.7.....	1.376	8.50-1
11.8.....	1.388	8.50-1
11.9.....	1.400	8.50-1
12.0.....	1.412	8.50-1
12.1.....	1.424	8.50-1
12.2.....	1.435	8.50-1
12.3.....	1.447	8.50-1
12.4.....	1.459	8.50-1
12.5.....	1.471	8.50-1
12.6.....	1.482	8.50-1
12.7.....	1.494	8.50-1
12.8.....	1.506	8.50-1
12.9.....	1.517	8.50-1
13.0.....	1.530	8.50-1
13.1.....	1.541	8.50-1
13.2.....	1.553	8.50-1
13.3.....	1.565	8.50-1
13.4.....	1.576	8.50-1
13.5.....	1.588	8.50-1
13.6.....	1.600	8.50-1
13.7.....	1.612	8.50-1
13.8.....	1.624	8.50-1
13.9.....	1.635	8.50-1
14.0.....	1.647	8.50-1
14.1.....	1.659	8.50-1
14.2.....	1.671	8.50-1
14.3.....	1.682	8.50-1
14.4.....	1.694	8.50-1
14.5.....	1.705	8.50-1
14.6.....	1.718	8.50-1
14.7.....	1.729	8.50-1
14.8.....	1.741	8.50-1
14.9.....	1.753	8.50-1
15.0.....	1.765	8.50-1
15.1.....	1.776	8.50-1
15.2.....	1.788	8.50-1
15.3.....	1.800	8.50-1
15.4.....	1.812	8.50-1
15.5.....	1.824	8.50-1
15.6 or more.....		8.50-1

cloth or other approved straining device of extra fine mesh to prevent passage of juice cells, pulp, or seeds.

VISUAL AID

§ 51.1180 Visual Aid.

(a) USDA Visual Aid CIT-(FL)-L-1, consists of a booklet containing color reproductions of Florida oranges and tangelos illustrating certain grade requirements, namely color, texture, varietal characteristics, shape, discoloration, and other defects as set forth in these standards. This visual aid may be examined in the Fruit and Vegetable Division, AMS, U.S. Department of Agriculture, South Building, Washington, D.C. 20250; in any field office of the Fresh Fruit and Vegetable Inspection Service; or upon request of any authorized inspector of such service. Duplicates of this visual aid may be purchased from the John Henry Co., Post Office Box 1410, Lansing, MI 48904.

The U.S. Standards for Grades of Florida Oranges and Tangelos contained in this subpart shall become effective October 15, 1967, and will thereupon supersede the U.S. Standards for Grades of Florida Oranges and Tangelos which have been in effect since September 15, 1960 (7 CFR 51.1140-51.1178), as amended January 10, 1961 and April 15, 1965.

Dated: September 20, 1967.

G. R. GRANGE,
Deputy Administrator,
Marketing Services.

[F.R. Doc. 67-11228; Filed, Sept. 26, 1967;
8:45 a.m.]

The printing of these standards incorporates an amendment to Section 51.1152, effective February 13, 1968, and is amended by adding a new Section 51.1180, effective January 31, 1973.

§ 51.1179 Method of juice extraction.

The juice used in the determining of solids, acid, and juice content shall be extracted from representative samples as thoroughly as possible with a hand reamer or by such mechanical extractor or extractors as may be approved. The juice shall be strained through cheese

FLORIDA ORANGES AND TANGELOS

Basic Requirements:

COLOR



Fairly well colored.



Reasonably well colored.

TEXTURE



Fairly smooth.



Slightly rough.

VALENCIA

(Late Type)



PINEAPPLE

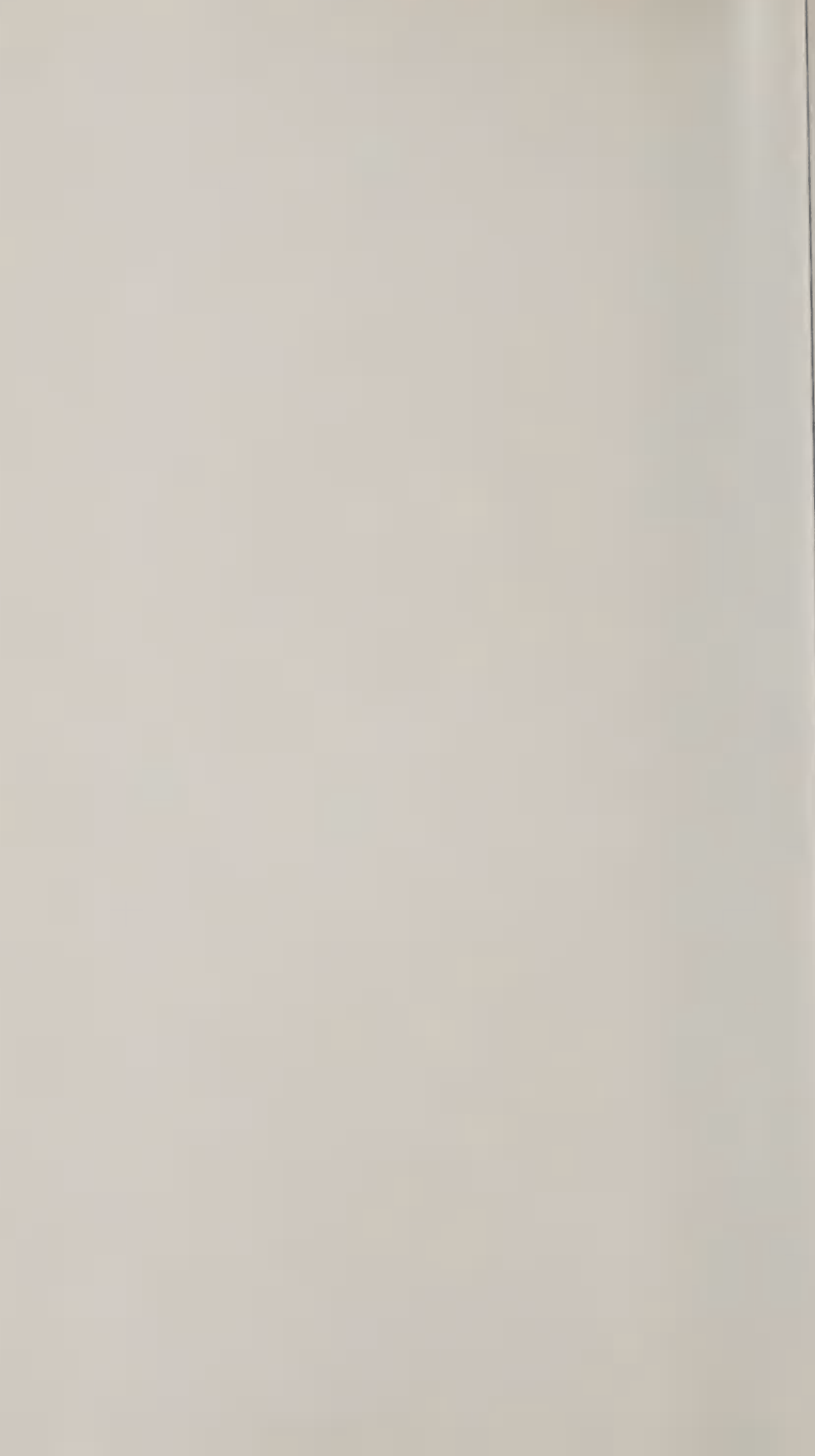
(Midseason Type)



VARIETAL CHARACTERISTICS

HAMLIN
(Early Type)





VARIETAL CHARACTERISTICS
(Continued)

NAVEL



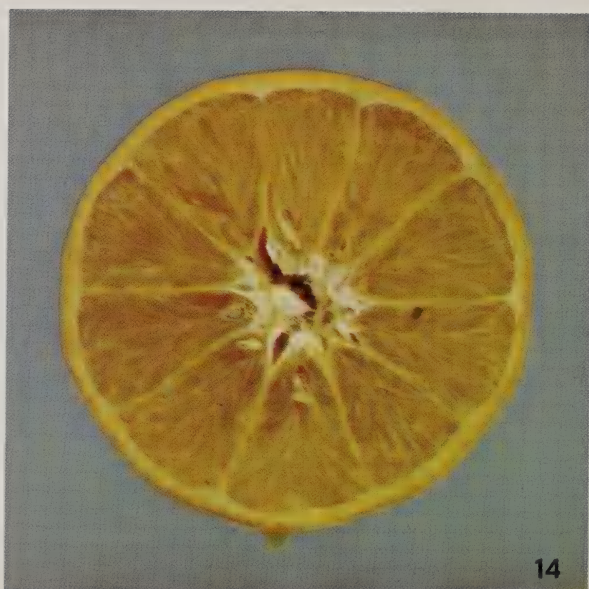
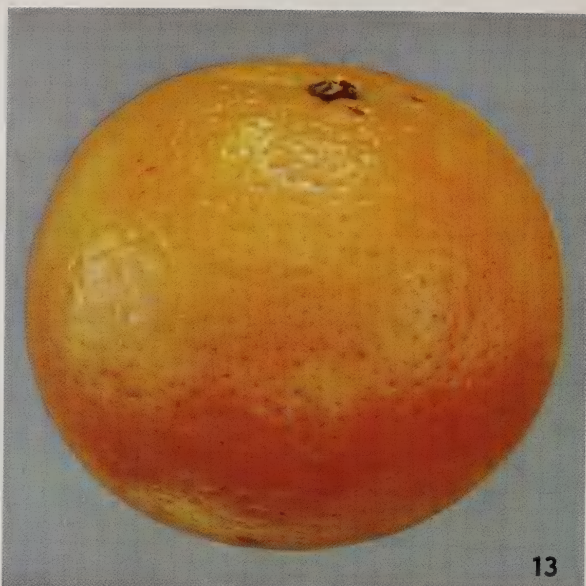
MINNEOLA

(Tangelo)



ORLANDO

(Tangelo)



VARIETAL CHARACTERISTICS
(Continued)

NAVEL



15



16



SHAPE



Well formed.



Well formed.

SHAPE (Continued)



19

Slightly misshapen.



20

Misshapen.

DISCOLORATION



21

Superficial scars.



22

Superficial scars.

DISCOLORATION (Continued)



23

Rust mite.



24

Speck type melanose.

Free From Defects



Cuts not healed.



Buckskin.

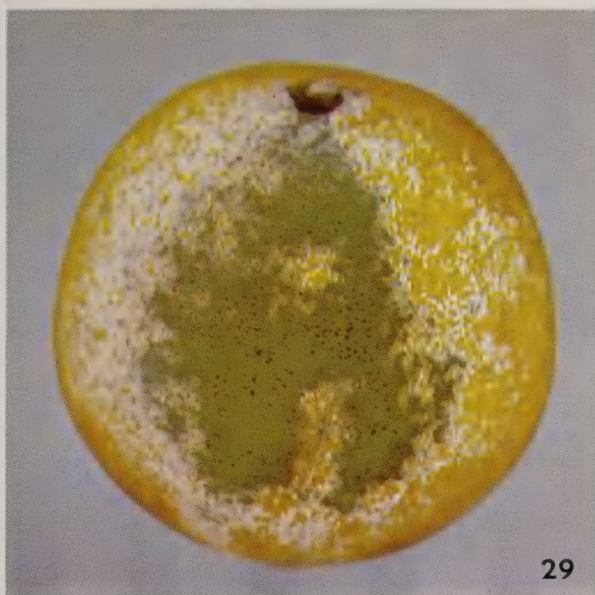
Free From Defects (Continued)



Bruises.



Growth crack.



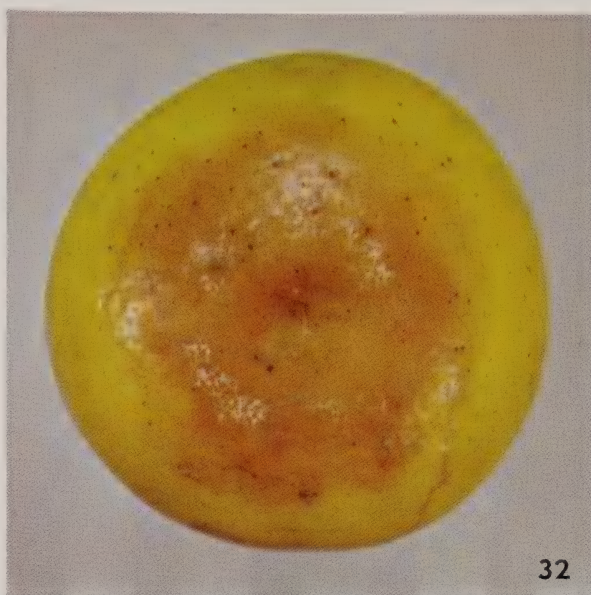
Green mold.



Blue-mold rot.



Sour rot.



Brown Rot



Side rot.

Free From Defects (Continued)

DECAY



Stem-end rot.



Black rot.

Free From Defects (Continued)

(Fold Out)

Classification of Defects:

CAKE MELANOSE

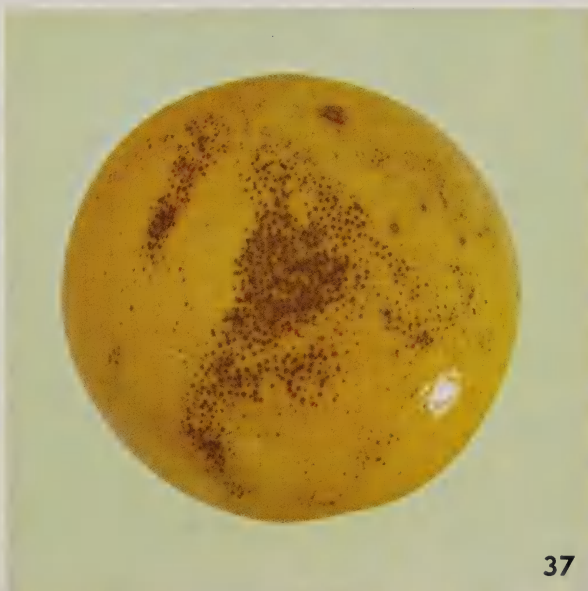
**U.S.
No. 1**



36

Maximum allowed.

**U.S.
No. 2**



37

Maximum allowed.

CREASING

**U.S.
No. 1**



39

Maximum allowed.

CREASING (Continued)

***U.S.
No. 2***



Maximum allowed.

GREEN SPOTS

**U.S.
No. 3**



42

HAIL

**U.S.
No. 1**



43

HAIL (Continued)

**U.S.
No. 2**



Maximum allowed.

**U.S.
No. 3**



OIL SPOTS

**U.S.
No. 1**



46

Maximum allowed.

**U.S.
No. 2**

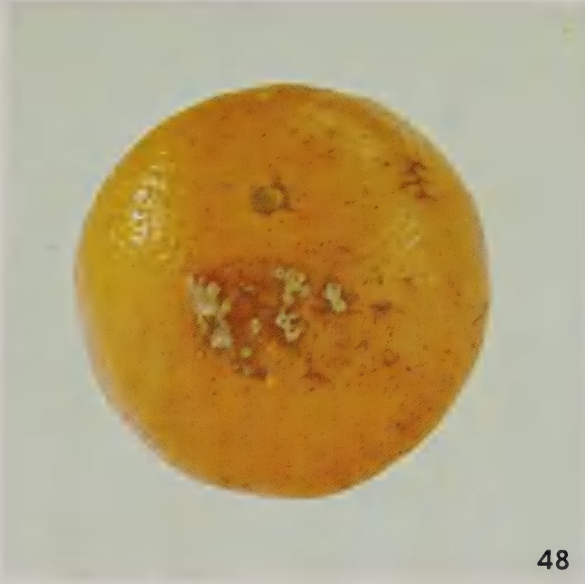


47

Maximum allowed.

SCAB

**U.S.
No. 1**



Maximum allowed.

**U.S.
No. 2**



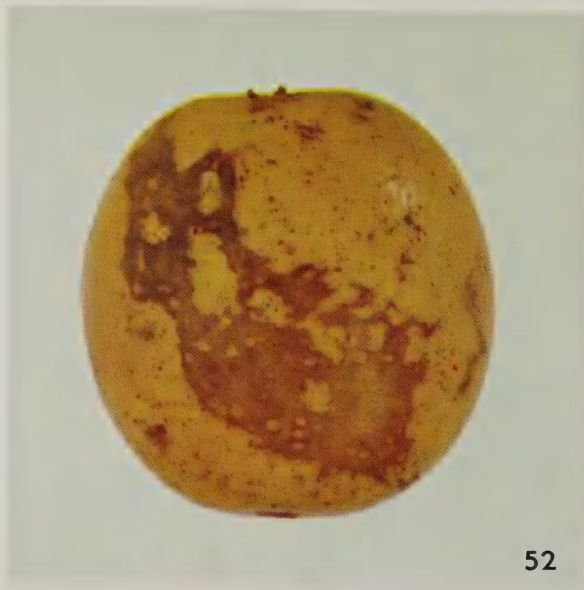
Maximum allowed.

***U.S.
No. 3***



51

**U.S.
No. 2**



52

Maximum allowed.

**U.S.
No. 3**



53

**U.S.
No. 1**



Maximum allowed.

**U.S.
No. 2**



Maximum allowed.

SCARS

***U.S.
No. 1***



Maximum allowed.

***U.S.
No. 1***



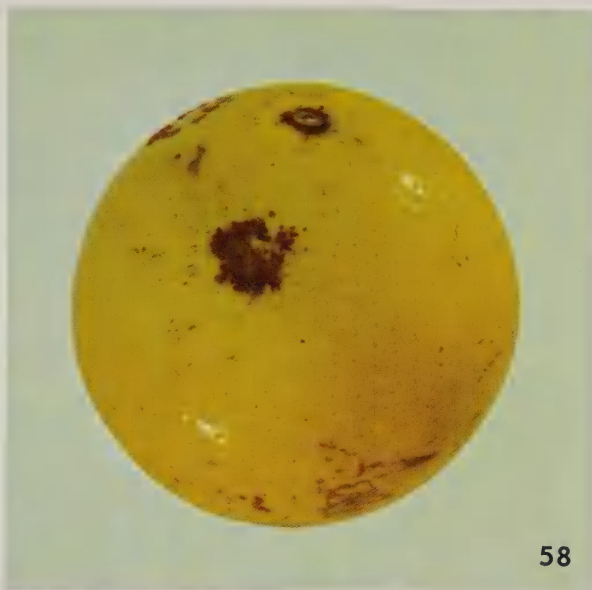
Maximum allowed.

Scar Section

(Fold Out)

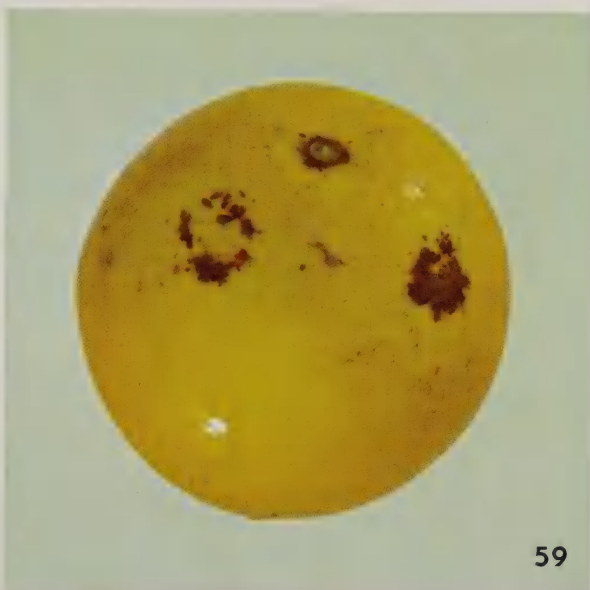
SCALE

***U.S.
No. 1***



Maximum allowed.

***U.S.
No. 2***



Maximum allowed.

SKIN BREAKDOWN

**U.S.
No. 1**



Maximum allowed.

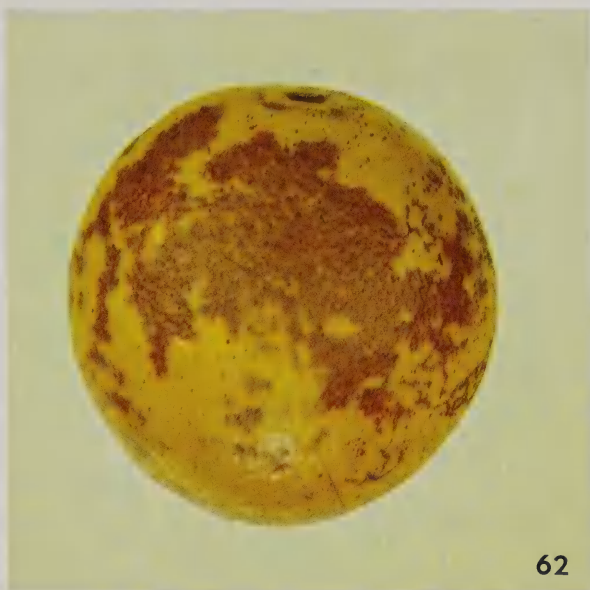
**U.S.
No. 2**



Maximum allowed.

SKIN BREAKDOWN (Continued)

**U.S.
No. 3**



62

SPRAY BURN

**U.S.
No. 1**



Maximum allowed.

**U.S.
No. 2**



Maximum allowed.

SUNBURN

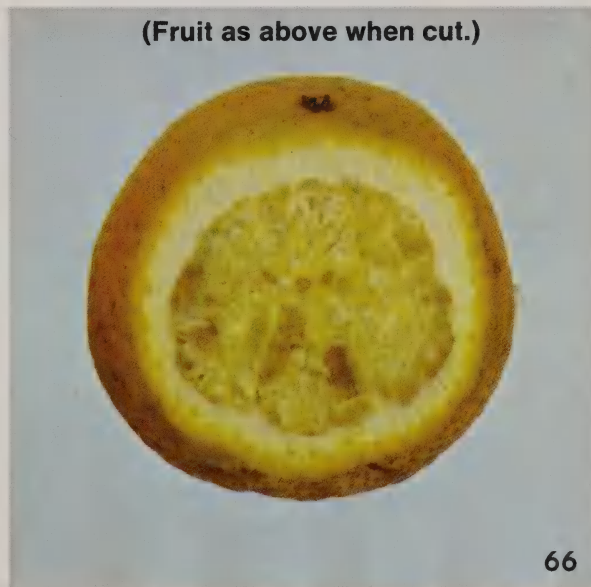
**U.S.
No. 2**



Maximum allowed.

(Fruit as above when cut.)

**U.S.
No. 2**



Maximum allowed.

SPLIT, ROUGH, PROTRUDING NAVEL

**U.S.
No. 1**



Maximum allowed.

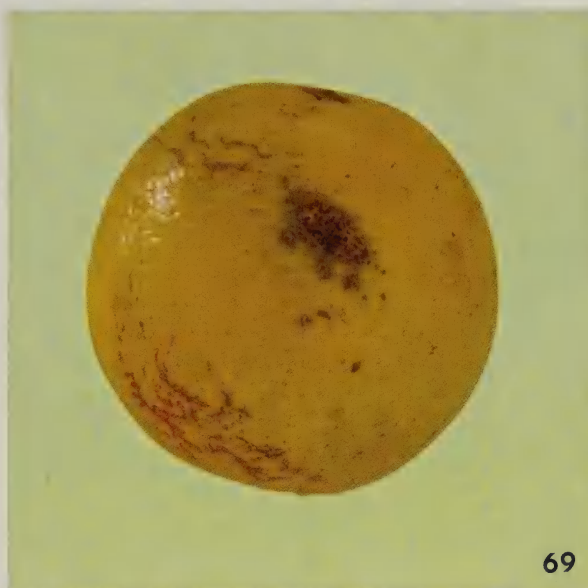
**U.S.
No. 1**



Maximum allowed.

THORN SCRATCHES

**U.S.
No. 1**



Maximum allowed.

**U.S.
No. 2**



Maximum allowed.

THORN SCRATCHES (Continued)

**U.S.
No. 3**



71

PULLED STEM

**U.S.
No. 1**



72

PULLED STEM (Continued)

***U.S.
No. 2***

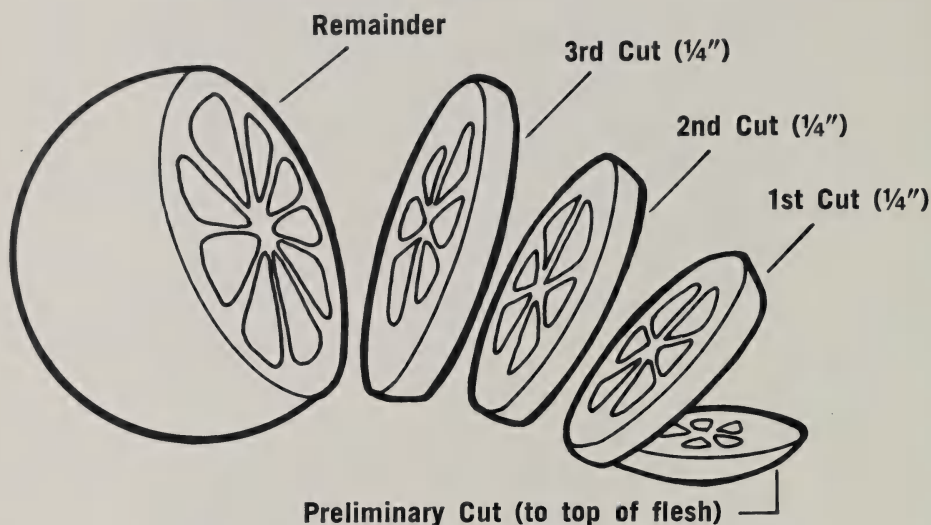


Maximum allowed.

***U.S.
No. 3***



GUIDE FOR SCORING DRYNESS OR MUSHY CONDITIONS



Preliminary Cut:

Removal of the rind under the button end down to the flesh.

1st Cut: 1/4" Slice.

Any amount of dryness or mushy condition permitted in this area, or equivalent by volume in other parts of fruit. ALL GRADES.

2nd Cut: 1/4" Slice.

If first cut (or equivalent) totally affected, any amount of dryness or mushy condition in second cut considered DAMAGE. Score against U. S. Fancy and U. S. No. 1, but handle as condition factor in market. Permit any amount in first cut and 2nd cut in U. S. No. 2 and U. S. No. 3.

3rd Cut: 1/4" Slice.

If first and second cuts (or equivalent) totally affected, any amount in this area considered SERIOUS DAMAGE. Handle as grade factor against U. S. Fancy or U. S. No. 1 in market. SCORE against U. S. No. 2 and U. S. No. 3, but handle as condition factor in market.

Remainder:

If first, second and third cuts (or equivalent) totally affected, any dryness or mushy condition in remaining area consider as VERY SERIOUS DAMAGE and score against U. S. No. 3 grade.

UNITED STATES STANDARDS
FOR GRADES OF
FLORIDA GRAPEFRUIT

EFFECTIVE OCTOBER 15, 1967
AS AMENDED FEBRUARY 13, 1968 AND JANUARY 31, 1973



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
WASHINGTON, D. C.

UNITED STATES STANDARDS FOR GRADES OF FLORIDA GRAPEFRUIT¹

Effective October 15, 1967

(32 F. R. 13487)

As amended February 13, 1968 (33 F. R. 2883)

and January 31, 1973 (37 F. R. 26417)

GRADES

Sec.	
51.750	U.S. Fancy.
51.751	U.S. No. 1.
51.752	U.S. No. 1 Bright.
51.753	U.S. No. 1 Golden.
51.754	U.S. No. 1 Bronze.
51.755	U.S. No. 1 Russet.
51.756	U.S. No. 2.
51.757	U.S. No. 2 Bright.
51.758	U.S. No. 2 Russet.
51.759	U.S. No. 3.

UNCLASSIFIED

51.760 Unclassified.

TOLERANCES

51.761 Tolerances.

STANDARD PACK

51.762 Standard pack.

DEFINITIONS

51.763 Similar varietal characteristics.

51.764 Well colored.

51.765 Firm.

51.766 Well formed.

51.767 Mature.

51.768 Smooth texture.

51.769 Injury.

51.770 Discoloration.

51.771 Fairly well colored.

51.772 Fairly smooth texture.

51.773 Damage.

51.774 Fairly firm.

51.775 Slightly misshapen.

51.776 Slightly rough texture.

51.777 Serious damage.

51.778 Slightly colored.

51.779 Misshapen.

51.780 Slightly spongy.

51.781 Very serious damage.

51.782 Diameter.

51.783 Classification of defects.

VISUAL AID

51.784 Visual Aid.

AUTHORITY: The provisions of this subpart issued under secs. 203, 205, 60 Stat. 1087, as amended, 1090 as amended; 7 U.S.C. 1622, 1624.

GRADES

§ 51.750 U.S. Fancy.

"U.S. Fancy" consists of grapefruit which meet the following requirements:

(a) Basic requirements:

(1) Discoloration:

¹ Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act or with applicable State laws and regulations.

(i) Not more than one-tenth of the surface, in the aggregate, may be affected by discoloration. (See § 51.770.)

(2) Firm;

(3) Mature;

(4) Similar varietal characteristics;

(5) Smooth texture;

(6) Well colored; and,

(7) Well formed.

(b) Free from:

(1) Ammoniation;

(2) Bruises;

(3) Buckskin;

(4) Caked melanose;

(5) Cuts not healed;

(6) Decay;

(7) Growth cracks;

(8) Scab;

(9) Sprayburn; and,

(10) Wormy fruit.

(c) Free from injury caused by:

(1) Green spots;

(2) Oil spots;

(3) Scale;

(4) Scars;

(5) Skin breakdown; and,

(6) Thorn scratches.

(d) Free from damage caused by:

(1) Dirt or other foreign material;

(2) Disease;

(3) Dryness or mushy condition;

(4) Hail;

(5) Insects;

(6) Sprouting;

(7) Sunburn; and,

(8) Other means.

(e) For tolerances see § 51.761.

§ 51.751 U.S. No. 1.

"U.S. No. 1" consists of grapefruit which meet the following requirements:

(a) Basic requirements:

(1) Discoloration:

(i) Not more than one-third of the surface, in the aggregate, may be affected by discoloration. (See § 51.770.)

(2) Fairly smooth texture;

(3) Fairly well colored;

(4) Firm;

(5) Mature;

(6) Similar varietal characteristics; and,

(7) Well formed.

(b) Free from:

(1) Bruises;

(2) Cuts not healed;

- (3) Decay;
- (4) Growth cracks; and,
- (5) Wormy fruit.
- (c) Free from damage caused by:
 - (1) Ammoniation;
 - (2) Buckskin;
 - (3) Caked melanose;
 - (4) Dirt or other foreign material;
 - (5) Disease;
 - (6) Dryness or mushy condition;
 - (7) Green spots;
 - (8) Hail;
 - (9) Insects;
 - (10) Oil spots;
 - (11) Scab;
 - (12) Scale;
 - (13) Scars;
 - (14) Skin breakdown;
 - (15) Sprayburn;
 - (16) Sprouting;
 - (17) Sunburn;
 - (18) Thorn scratches; and,
 - (19) Other means.
- (d) For tolerances see § 51.761.

§ 51.752 U.S. No. 1 Bright.

The requirements for this grade are the same as for the U.S. No. 1 except that no fruit may have more than one-fifth of its surface, in the aggregate, affected by discoloration.

- (a) For tolerances see § 51.761.

§ 51.753 U.S. No. 1 Golden.

The requirements for this grade are the same as for U.S. No. 1 except that not more than the number of fruits permitted in § 51.761, Tables I and II, shall have more than one-third of their surface, in the aggregate, affected by discoloration.

- (a) For tolerances see § 51.761.

§ 51.754 U.S. No. 1 Bronze.

The requirements for this grade are the same as for U.S. No. 1 except that all fruit must show some discoloration. Not less than the number of fruits required in § 51.761, Tables I and II, shall have more than one-third of their surface, in the aggregate, affected by discoloration. The predominating discoloration on these fruits shall be of rust mite type.

- (a) For tolerances see § 51.761.

§ 51.755 U.S. No. 1 Russet.

The requirements for this grade are the same as for U.S. No. 1 except that not less than the number of fruits required in § 51.761, Tables I and II, shall have more than one-third of their surface, in the aggregate, affected by any type of discoloration.

- (a) For tolerances see § 51.761.

§ 51.756 U.S. No. 2.

"U.S. No. 2" consists of grapefruit which meet the following requirements:

- (a) Basic requirements:
 - (1) Discoloration:
 - (i) Not more than one-half of the surface, in the aggregate, may be affected by discoloration. (See § 51.770.)
 - (2) Fairly firm;
 - (3) Mature;
 - (4) Similar varietal characteristics;
 - (5) Slightly colored;
 - (6) Not more than slightly misshapen;
 - and,
 - (7) Not more than slightly rough texture.
- (b) Free from:
 - (1) Bruises;
 - (2) Cuts not healed;
 - (3) Decay;
 - (4) Growth cracks; and,
 - (5) Wormy fruit.
- (c) Free from serious damage caused by:

- (1) Ammoniation;
- (2) Buckskin;
- (3) Caked melanose;
- (4) Dirt or other foreign material;
- (5) Disease;
- (6) Dryness or mushy condition;
- (7) Green spots;
- (8) Hail;
- (9) Insects;
- (10) Oil spots;
- (11) Scab;
- (12) Scale;
- (13) Scars;
- (14) Skin breakdown;
- (15) Sprayburn;
- (16) Sprouting;
- (17) Sunburn;
- (18) Thorn scratches; and,
- (19) Other means.
- (d) For tolerances see § 51.761.

§ 51.757 U.S. No. 2 Bright.

The requirements for this grade are the same as for U.S. No. 2 except that no fruit may have more than one-fifth of its surface, in the aggregate, affected by discoloration.

- (a) For tolerances see § 51.761.

§ 51.758 U.S. No. 2 Russet.

The requirements for this grade are the same as for U.S. No. 2 except that not less than the number of fruits required in § 51.761, Tables I and II, shall have more than one-half of their surface, in the aggregate, affected by discoloration.

- (a) For tolerances see § 51.761.

§ 51.759 U.S. No. 3.

"U.S. No. 3" consists of grapefruit which meet the following requirements:

(a) Basic requirements:

- (1) Mature;
- (2) Misshapen;
- (3) Poorly colored:

(i) Not more than 25 percent of the surface may be of a solid dark green color.

(4) Rough texture, not seriously bumpy;

(5) Similar varietal characteristics; and,

(6) Slightly spongy.

(b) Free from:

- (1) Cuts not healed;
- (2) Decay; and,
- (3) Wormy fruit.

(c) Free from very serious damage caused by:

- (1) Ammoniation;
- (2) Bruises;
- (3) Buckskin;
- (4) Caked melanose;
- (5) Disease;
- (6) Dryness or mushy condition;
- (7) Growth cracks;
- (8) Hail;
- (9) Insects;
- (10) Scab;
- (11) Scale;

(12) Scars;

(13) Skin breakdown;

(14) Sprayburn;

(15) Sprouting;

(16) Sunburn; and,

(17) Other means.

(d) For tolerances see § 51.761.

UNCLASSIFIED

§ 51.760 Unclassified.

"Unclassified" consists of grapefruit which have not been classified in accordance with any of the foregoing grades. The term "unclassified" is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

TOLERANCES

§ 51.761 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, based on sample inspection, the number of defective or off-size specimens in the individual sample, and the number of defective or off-size specimens in the lot, shall be within the limitations specified in Tables I and II. No tolerance shall apply to wormy fruit.

TABLE I—SHIPPING POINT ¹
(a) FOR 1 THROUGH 50 SAMPLES

Factor	Grades	A.L. ²	Number of 33-count samples ³																				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
			Acceptance numbers ⁴ (maximum permitted)																				
Decay-----	U.S. Fancy-----	1	0	0	0	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4
	U.S. No. 1-----																						
	U.S. No. 2-----																						
Very serious damage including decay.	U.S. No. 3-----	1	0	1	1	1	2	2	2	2	3	3	3	4	4	4	4	5	5	5	5	5	
	U.S. Fancy-----	4	3	5	7	8	10	11	13	14	16	17	18	20	21	23	24	25	27	28	30	31	
	U.S. No. 1-----																						
U.S. No. 2-----																							
Total defects including decay and very serious damage.	All-----	5	5	9	12	16	19	22	25	28	31	34	37	40	44	46	49	52	55	58	61	64	
	U.S. No. 1-----	7	5	9	12	16	19	22	25	28	31	34	37	40	44	46	49	52	55	58	61	64	
	U.S. No. 2-----																						
U.S. No. 3-----																							
U.S. No. 4-----																							
Off-size-----	U.S. No. 1-----	7	5	9	12	16	19	22	25	28	31	34	37	40	44	46	49	52	55	58	61	64	
	U.S. No. 2-----																						
	U.S. No. 3-----																						
Discoloration-----	U.S. No. 1-----	7	5	9	12	16	19	22	25	28	31	34	37	40	44	46	49	52	55	58	61	64	
	U.S. No. 2-----																						
	U.S. No. 3-----																						
U.S. No. 1 Golden.	U.S. No. 1-----	16	13	23	34	44	54	63	73	83	92	102	112	122	131	140	150	159	169	178	188	197	
	U.S. No. 2-----	16																					
	U.S. No. 3-----																						
U.S. No. 1 Bronze, U.S. No. 1 Russet.	U.S. No. 1-----		9	20	32	44	56	68	81	93	105	118	130	142	155	168	180	193	206	218	231	244	
	U.S. No. 2-----	16																					
	U.S. No. 3-----																						
U.S. No. 2, Russet.	U.S. No. 1-----		2	4	8	11	14	18	21	25	29	32	36	39	43	47	50	53	57	61	64	68	
	U.S. No. 2-----	16																					
	U.S. No. 3-----																						

Factor	Grades	AL ¹	Number of 33-count samples ²																				
			21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
			Acceptance numbers ⁴ (maximum permitted)																				
Decay-----	U.S. Fancy----- U.S. No. 1----- U.S. No. 2-----	1	4	4	4	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	
	U.S. No. 3-----		1	5	6	6	6	6	7	7	7	7	7	7	8	8	8	8	9	9	9	9	
	U.S. Fancy----- U.S. No. 1----- U.S. No. 2-----		4	32	34	35	36	38	39	40	42	43	44	45	47	48	49	51	52	53	54	56	57
All-----	5	67		70	73	76	79	82	84	87	90	93	96	99	102	105	107	110	113	116	119	122	
Off-size-----	7	67		70	73	76	79	82	84	87	90	93	96	99	102	105	107	110	113	116	119	122	
Discoloration-----	U.S. No. 1----- U.S. No. 1----- Bright----- U.S. No. 2----- U.S. No. 2----- Bright-----	7	67	70	73	76	79	82	84	87	90	93	96	99	102	105	107	110	113	116	119	122	
	U.S. No. 1 Golden-----		16	206	216	225	234	247	253	264	274	281	290	300	309	318	327	337	346	355	364	374	383
	U.S. No. 1 Bronze----- U.S. No. 1 Russet-----		6	256	260	282	294	307	320	333	345	358	371	383	396	409	422	435	447	460	473	486	499
U.S. No. 2 Russet-----	0	72		76	80	84	88	92	96	99	103	107	110	114	118	122	126	130	134	137	141	145	

¹ Shipping point, as used in these standards, means the point of origin of the shipment in the production area or at port of loading for ship stores or overseas shipments, or in the case of shipments from outside the continental United States, the port of entry into the United States.

² Sample size—33 count.

⁴ Acceptance number—Maximum or minimum number of defective or off-size fruit permitted.

⁵ Preferred number of samples for this acceptance number.

¹ AL—Absolute limit permitted in individual 33-count sample.

TABLE II—EN ROUTE OR AT DESTINATION

Factor	Grades	A.L. ¹	Number of 33-count samples ²																			
			Acceptance numbers ³ (maximum permitted)																			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Decay-----	All-----	3	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Very serious damage other than decay.	U.S. Fancy----- U.S. No. 1----- U.S. No. 2-----	4	3	5	7	8	10	11	13	14	16	17	18	20	21	23	24	25	27	28	30	31
Total defects including very serious damage other than decay.	All-----	5	5	9	12	16	19	22	25	28	31	34	37	40	44	46	49	52	55	58	61	64
Off-size-----	-----	7	5	9	12	16	19	22	25	28	31	34	37	40	44	46	49	52	55	58	61	64
Discoloration-----	U.S. No. 1----- U.S. No. 1 Bright----- U.S. No. 2----- U.S. No. 2 Bright-----	7	5	9	12	16	19	22	25	28	31	34	37	40	44	46	49	52	55	58	61	64
	U.S. No. 1 Golden.	13	13	23	34	44	54	63	73	83	92	100	112	122	131	140	150	159	169	178	188	197
	U.S. No. 1 Bresse. U.S. No. 1 Russet.	6	9	20	32	44	56	68	81	93	105	118	130	142	155	168	180	193	206	218	231	244
	U.S. No. 2 Russet.	5	2	4	8	11	14	18	21	25	28	32	36	39	43	47	50	53	57	61	64	68

¹ A.L.—Absolute limit permitted in individual 33-count sample.² Sample size—33 count.³ Acceptance number—Maximum or minimum number of defective or off-size fruit permitted.⁴ Preferred number of samples for this acceptance number.

STANDARD PACK

§ 51.762 Standard pack.

(a) Fruits shall be fairly uniform in size, unless specified as uniform in size, and when packed in boxes or cartons, shall be arranged according to the approved and recognized methods. Each wrapped fruit shall be fairly well enclosed by its individual wrapper.

(b) All such containers shall be tightly packed and well filled but the contents shall not show excessive or unnecessary bruising because of overfilled packages. When grapefruits are packed in standard nailed boxes, each box shall have a minimum bulge of 2 inches, except that boxes packed with grapefruit of a size 80 or smaller need only have a bulge of 1½ inches. When packed in cartons or in wire-bound boxes, each container shall be at least level full at time of packing.

(c) "Fairly uniform in size" means that not more than the number of fruits permitted in § 51.761, Tables I and II, are outside the ranges of diameters given in the following table for various packs:

TABLE III—DIAMETER IN INCHES

Pack	Minimum	Maximum
36's	5	5¾
45's or 46's	4½	5½
54's or 56's	4¾	4½
64's	4¾	4½
70's or 72's	3½	4¾
80's	3½	4¾
96's	3¾	4¾
112's	3¾	4
125's or 126's	3¾	3½

(d) "Uniform in size" means that not more than the number of fruits permitted in § 51.761, Tables I and II, vary more than the following amounts:

(1) 44 size and smaller—not more than ¾ inch in diameter.

(2) 54 size and larger—not more than ¾ inch in diameter.

(e) In order to allow for variations, other than sizing, incident to proper packing, not more than 5 percent of the packages in any lot may fail to meet the requirements of standard pack.

DEFINITIONS

§ 51.763 Similar varietal characteristics.

"Similar varietal characteristics" means that the fruits in any container are similar in color and shape.

§ 51.764 Well colored.

"Well colored" means that the fruit is yellow in color with practically no trace of green color.

§ 51.765 Firm.

"Firm" means that the fruit is not soft, or noticeably wilted or flabby, and the skin is not spongy or puffy.

§ 51.766 Well formed.

"Well formed" means that the fruit has the shape characteristic of the variety.

§ 51.767 Mature.

"Mature" shall have the same meaning currently assigned that term in sections 601.16, 601.17, and 601.18 of the Florida Citrus Code of 1949, as amended (Chs. 28090 and 29760, Laws of Florida, 1953 and 1955) or as the definition of such term may hereafter be amended.

§ 51.768 Smooth texture.

"Smooth texture" means that the skin is thin and smooth for the variety and size of the fruit.

§ 51.769 Injury.

"Injury" means any specific defect described in § 51.783, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which slightly detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.770 Discoloration.

"Discoloration" means russetting of a light shade of golden brown caused by rust mite or other means. Lighter shades of discoloration caused by superficial scars or other means may be allowed on a greater area, or darker shades may be allowed on a lesser area, provided no discoloration caused by speck type melanose or other means may detract from the appearance of the fruit to a greater extent than the shade and amount of discoloration allowed in the grade.

§ 51.771 Fairly well colored.

"Fairly well colored" means that, except for an aggregate area of green color which does not exceed the area of a circle 1 inch in diameter, the yellow or orange color predominates over the green color.

§ 51.772 Fairly smooth texture.

"Fairly smooth texture" means that the skin is fairly thin and not coarse for the variety and size of the fruit.

§ 51.773 Damage.

"Damage" means any specific defect described in § 51.783, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.774 Fairly firm.

"Fairly firm" means that the fruit may be slightly soft, but not bruised, and the skin is not spongy, or puffy.

§ 51.775 Slightly misshapen.

"Slightly misshapen" means that the fruit has fairly good shape characteristic of the variety and is not more than slightly elongated or pointed or otherwise deformed.

§ 51.776 Slightly rough texture.

"Slightly rough texture" means that the skin may be slightly thick but not excessively thick, materially ridged or grooved.

§ 51.777 Serious damage.

"Serious damage" means any specific defect described in § 51.783, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects,

which seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.778 Slightly colored.

"Slightly colored" means that except for an aggregate area of green color which does not exceed the area of a circle 2 inches in diameter, the fruit surface shows some yellow color.

§ 51.779 Misshapen.

"Misshapen" means that the fruit is decidedly elongated, pointed, or flat-sided.

§ 51.780 Slightly spongy.

"Slightly spongy" means that the fruit is puffy or slightly wilted but not flabby.

§ 51.781 Very serious damage.

"Very serious damage" means any specific defect described in § 51.783, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which very seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.782 Diameter.

"Diameter" means the greatest dimension measured at right angles to a line from stem to blossom end.

§ 51.783 Classification of defects.

TABLE IV

Factor	Injury	Damage	Serious damage	Very serious damage
Ammoniation.....		Not occurring as light speck type.	Scars are cracked or dark and aggregating more than a circle 1 inch in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.
Buckskin.....		Aggregating more than a circle $1\frac{1}{4}$ inches in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.	Aggregating more than 50 percent of the surface.
Caked melanose.....		Aggregating more than a circle $\frac{3}{4}$ inch in diameter on a 70 size grapefruit.	Aggregating more than a circle 1 inch in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.
Dryness or mushy condition.....		Affecting all segments more than $\frac{1}{4}$ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than $\frac{1}{2}$ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than $\frac{1}{4}$ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.
Green spots.....	More than slightly affecting appearance.	More than 10 spots caused by scale, each spot equivalent to the area of circle $\frac{1}{4}$ inch in diameter on a 70 size grapefruit.	More than 25 spots caused by scale, each spot equivalent to the area of a circle $\frac{1}{4}$ inch in diameter on a 70 size grapefruit.	
Hail.....	Not well healed, or aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 70 size grapefruit.	Not well healed, or aggregating more than a circle $\frac{1}{2}$ inch in diameter on a 70 size grapefruit.	Not well healed, or aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 70 size grapefruit.	Not well healed, or aggregating more than a circle 1 inch in diameter on a 70 size grapefruit.
Oil spots.....	More than slightly affecting appearance.	More than 5 spots, or aggregating more than a circle $\frac{3}{4}$ inch in diameter on a 70 size grapefruit.	More than 10 spots, or aggregating more than a circle 1 inch in diameter on a 70 size grapefruit.	
Scab.....		Materially detracts from the shape or texture, or aggregating more than a circle $\frac{3}{4}$ inch in diameter on a 70 size grapefruit.	Seriously detracts from the shape or texture, or aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.
Scale.....	More than a few adjacent to the "button" at the stem end, or more than 6 scattered on other portions of the fruit.	Blotch aggregating more than a circle $\frac{3}{4}$ inch in diameter, or occurring as a ring more than a circle $1\frac{1}{4}$ inches in diameter on a 70 size grapefruit.	Blotch aggregating more than a circle 1 inch in diameter, or occurring as a ring more than a circle $1\frac{1}{4}$ inches in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.
Scars.....	Depressed, not smooth, or detracts from appearance more than the amount of discoloration permitted in the grade.	Deep, not smooth, or shallow or fairly shallow and detracts from appearance more than the amount of discoloration permitted in the grade.	Very deep, fairly smooth, or detracts from appearance more than the amount of discoloration permitted in the grade.	Deep, rough, or unsightly that appearance is very seriously affected.
Skin breakdown.....		Aggregating more than a circle $\frac{3}{4}$ inch in diameter on a 70 size grapefruit.	Aggregating more than a circle $\frac{3}{4}$ inch in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.
Sprayburn.....		Aggregating more than a circle $\frac{3}{4}$ inch in diameter on a 70 size grapefruit.	Hard and aggregating more than a circle $1\frac{1}{4}$ inches in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.
Sprouting.....		More than 6 seeds are sprouted, or more than 1 sprout is more than $\frac{1}{4}$ inch in length.	More than 6 seeds are sprouted, or more than 1 sprout is more than $\frac{1}{2}$ inch in length.	More than 6 seeds are sprouted or more than 1 sprout is more than $\frac{3}{4}$ inch in length.

TABLE IV—Continued

Factor	Injury	Damage	Serious damage	Very serious damage
Sunburn.....		Skin is flattened, dry, darkened, or hard and the affected area exceeds 25 percent of the surface.	Skin is hard and affects more than one-third of the surface.	Aggregating more than 75 percent of the surface.
Thorn scratches...	Not well healed, or more unsightly than discoloration permitted in the grade.	Not well healed, or hard concentrated thorn injury aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 70 size grapefruit.	Not well healed, or hard concentrated thorn injury aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 70 size grapefruit.	Aggregating more than 25 percent of the surface.

VISUAL AID

§ 51.784 Visual Aid.

(a) USDA Visual Aid CIT-(FL)-L-1, consists of a booklet containing color reproductions of Florida grapefruit illustrating certain grade requirements, namely color, shape, varietal characteristics, discoloration, and other defects as set forth in these standards. This visual aid may be examined in the Fruit and Vegetable Division, AMS, U.S. Department of Agriculture, South Building, Washington, D.C. 20250; in any field office of the Fresh Fruit and Vegetable Inspection Service; or upon request of any authorized inspector of such service. Duplicates of this visual aid may be purchased from the John Henry Co., Post Office Box 1410, Lansing, MI 48901.

The U.S. Standards for Grades of Florida Grapefruit contained in this subpart shall become effective October 15, 1967, and will thereupon supersede the U.S. Standards for Grades of Florida Grapefruit which have been in effect since September 15, 1960 (7 CFR 51.750-51.783), as amended January 10, 1961.

Dated: September 20, 1967.

G. R. GRANGE,
Deputy Administrator,
Marketing Services.

[F.R. Doc. 67-11227; Filed, Sept. 26, 1967;
8:45 a.m.]

The printing of these standards incorporates an amendment to Section 51.761, effective February 13, 1968, and is amended by adding a new Section 51.784, effective January 31, 1973.

FLORIDA GRAPEFRUIT

FLORIDA GRAPEFRUIT

Basic Requirements:

COLOR



Fairly well colored.

SHAPE



Well formed.

SEEDED

(White)



77



78

SEEDED

(Pink)



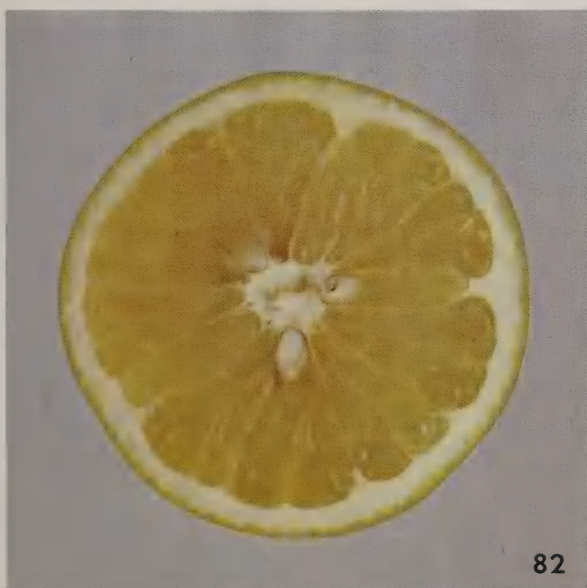
79



80

SEEDLESS

(White)



SEEDLESS

(Pink)



83



84

VARIETAL CHARACTERISTICS

(Fold Out)

SHAPE (Continued)

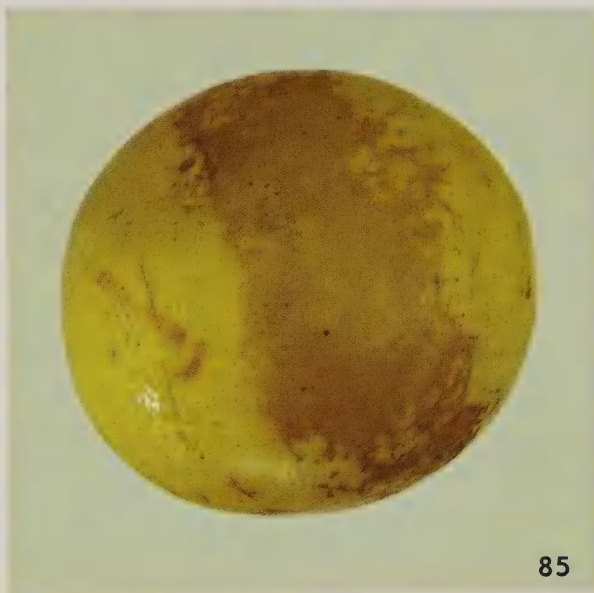


76-A

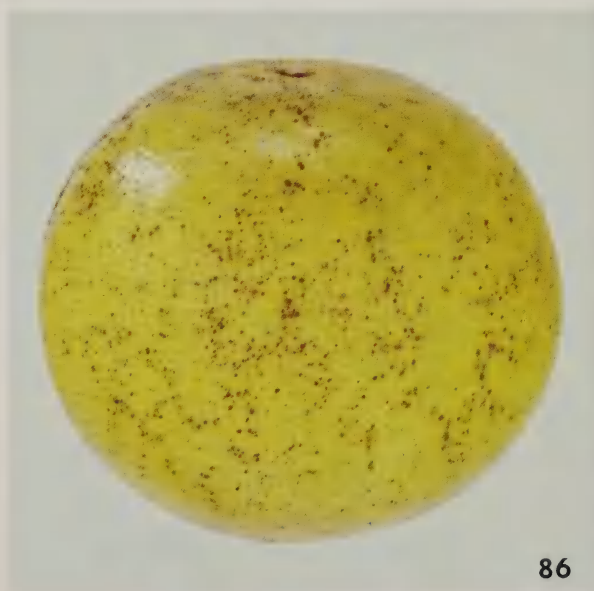
Well formed.

42(A thru D)

DISCOLORATION



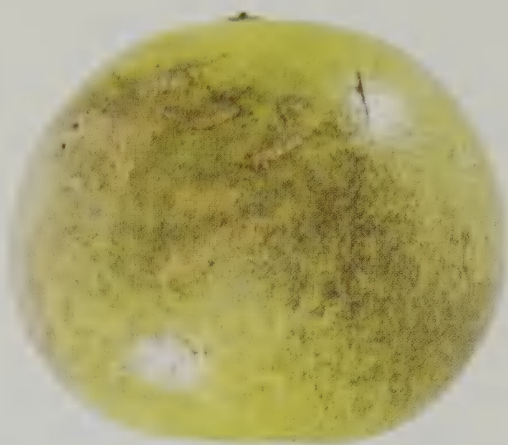
Superficial scars.



Speck type melanose.

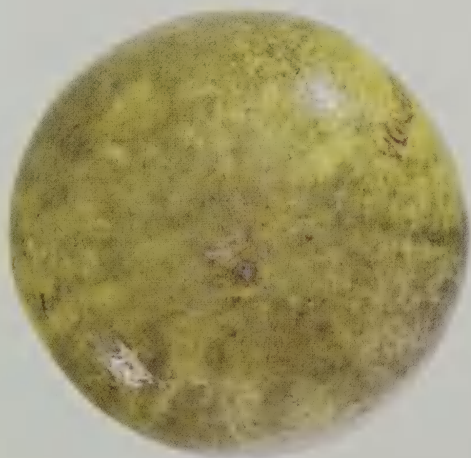
Maximum allowed. (Entire surface)

DISCOLORATION (Continued)



87

Rust mite.



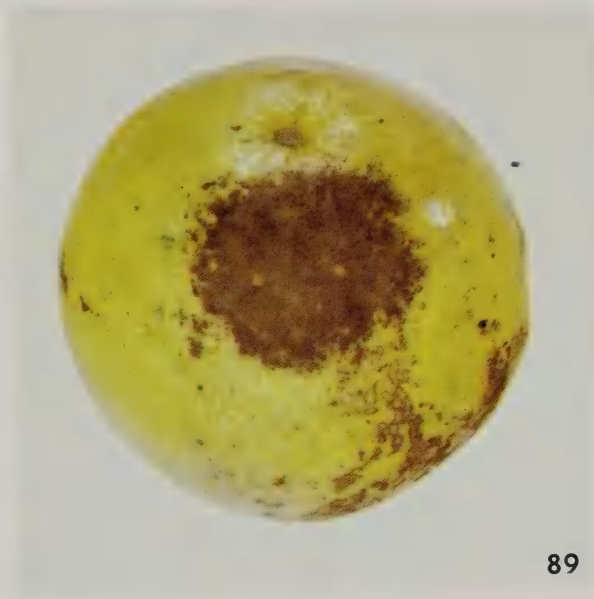
88

Rust mite.

Classification of Defects:

BUCK SKIN

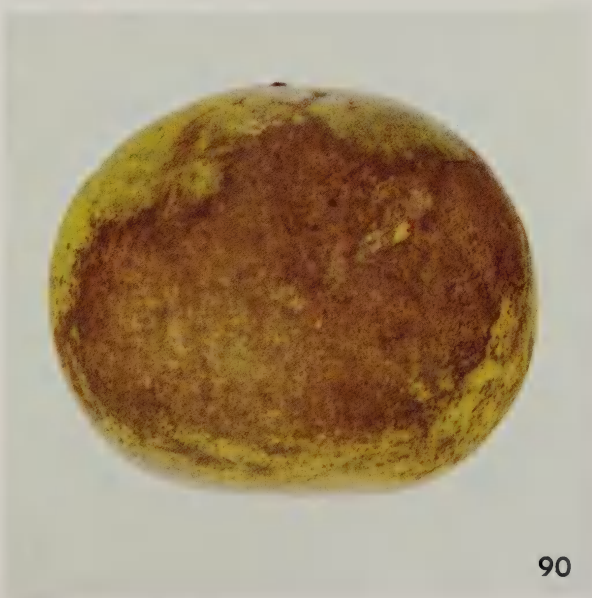
**U.S.
No. 1**



89

Maximum allowed.

**U.S.
No. 2**



90

Maximum allowed.

CAKED MELANOSE

**U.S.
No. 2**



Maximum allowed.

HAIL

**U.S.
No. 1**



Maximum allowed.

HAIL (Continued)

***U.S.
No. 2***



93

Maximum allowed.

***U.S.
No. 3***



94

OIL SPOTS

**U.S.
No. 1**



95

Maximum allowed.

**U.S.
No. 2**

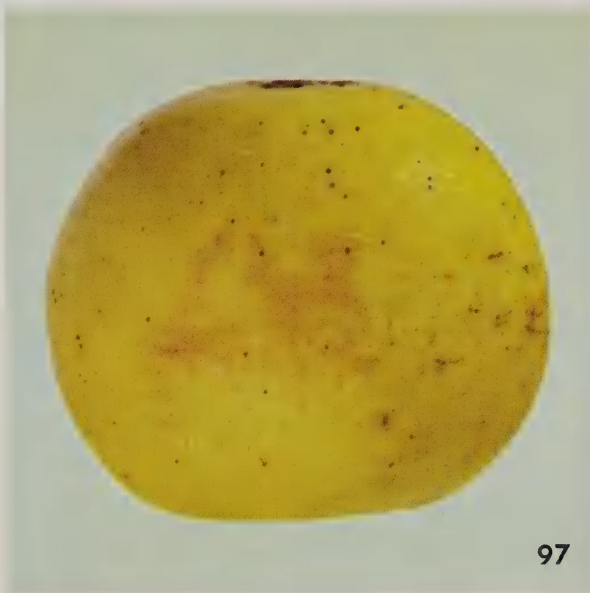


96

Maximum allowed.

OIL SPOTS (Continued)

***U.S.
No. 3***



97

SCALE

**U.S.
No. 1**



98

Ring – maximum allowed.

**U.S.
No. 2**

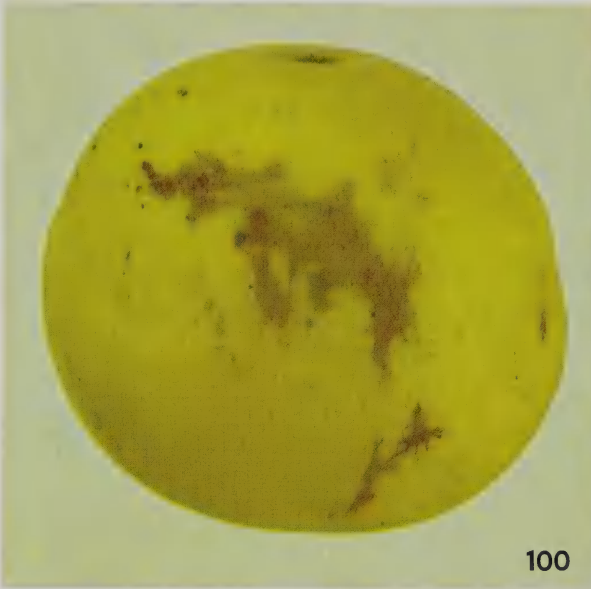


99

Blotch – maximum allowed.

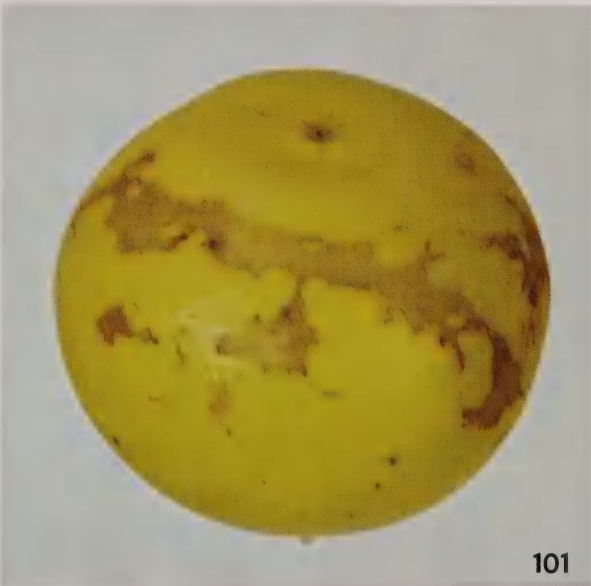
SCARS

**U.S.
No. 1**



Maximum allowed.

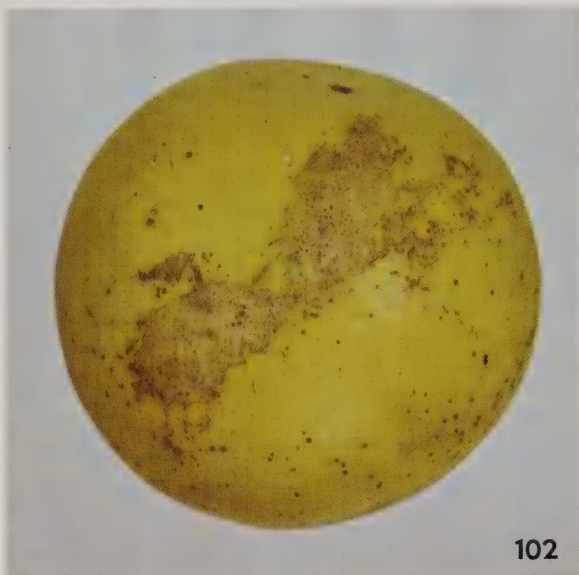
**U.S.
No. 1**



Maximum allowed.

SCARS (Continued)

**U.S.
No. 2**



Maximum allowed.

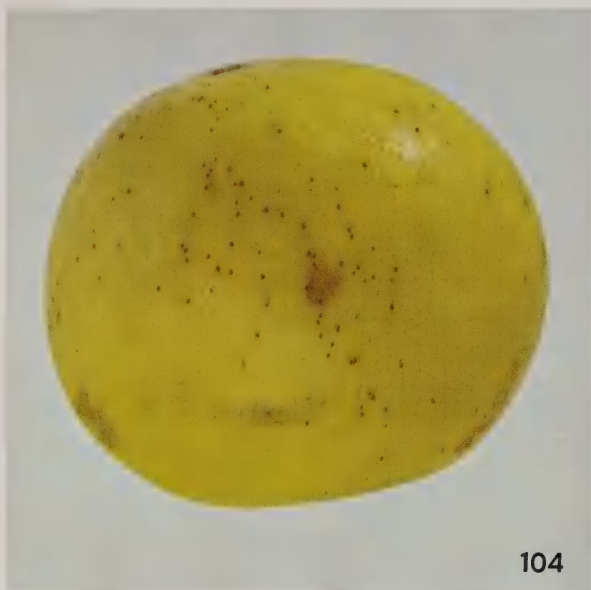
**U.S.
No. 2**



Maximum allowed.

SKIN BREAKDOWN

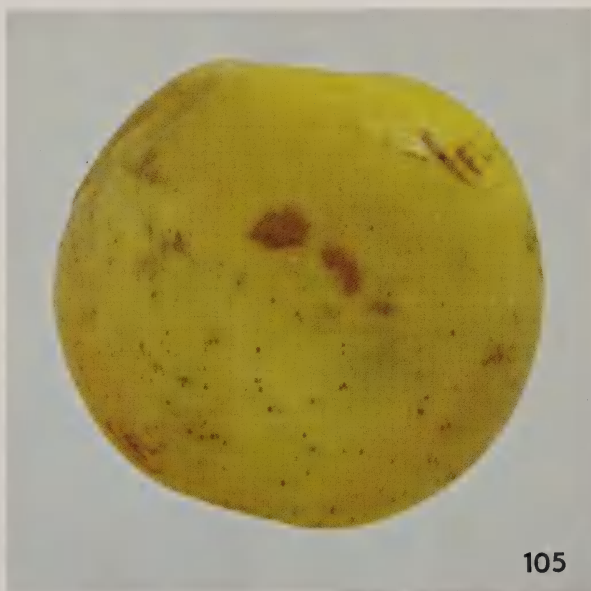
**U.S.
No. 1**



104

Maximum allowed.

**U.S.
No. 2**



105

Maximum allowed.

SPRAYBURN

**U.S.
No. 2**

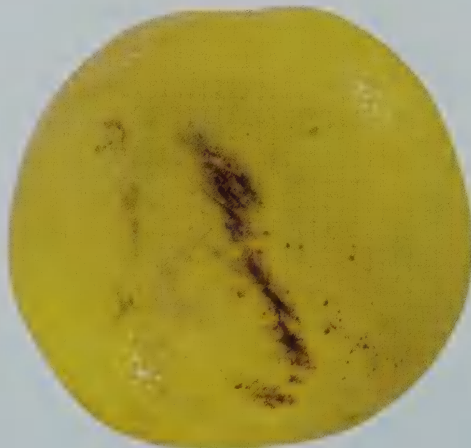


106

Maximum allowed.

THORN SCRATCHES

**U.S.
No. 2**

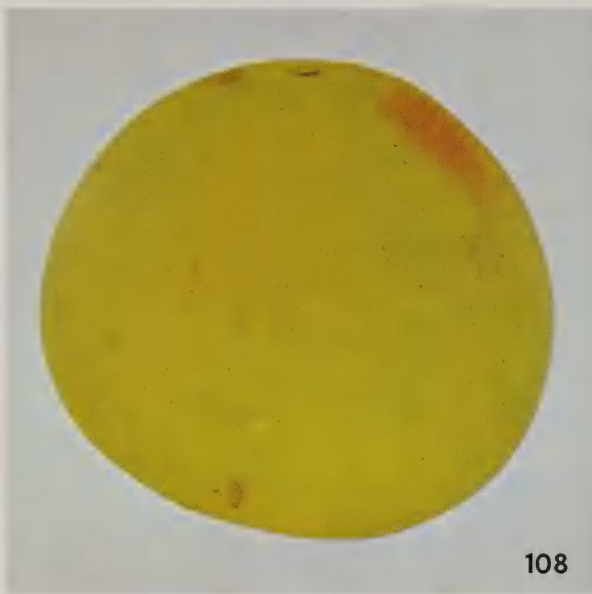


107

Maximum allowed.

SUNBURN

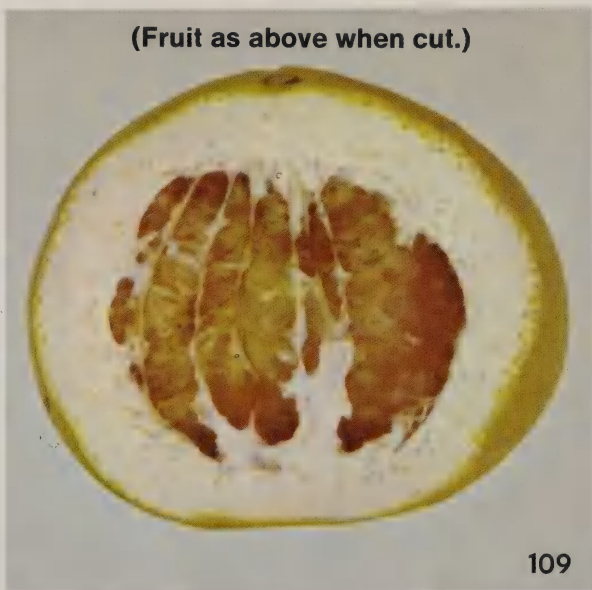
**U.S.
No. 1**



Maximum allowed.

(Fruit as above when cut.)

**U.S.
No. 1**



Maximum allowed.

SUNBURN (Continued)

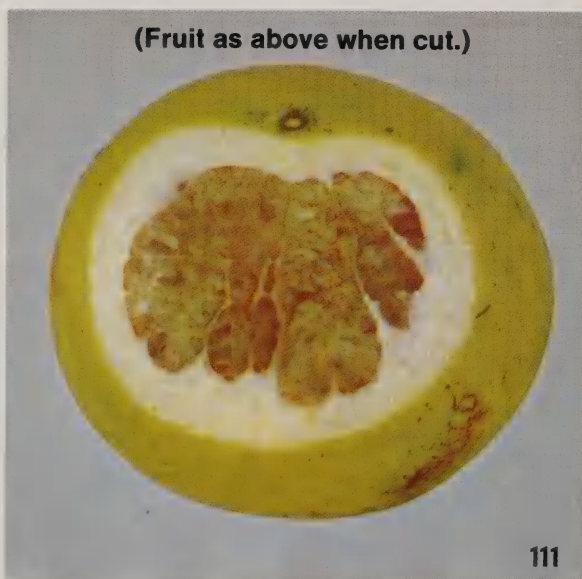
**U.S.
No. 2**



Maximum allowed.

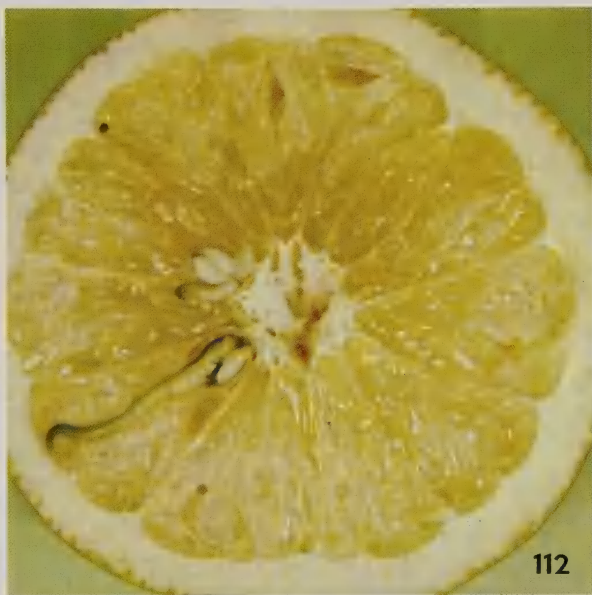
(Fruit as above when cut.)

**U.S.
No. 2**



Maximum allowed.

SPROUTING



UNITED STATES STANDARDS FOR GRADES OF FLORIDA TANGERINES

**EFFECTIVE OCTOBER 15, 1967
AS AMENDED FEBRUARY 13, 1968 AND JANUARY 31, 1973**



**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
WASHINGTON, D. C.**

UNITED STATES STANDARDS FOR GRADES OF FLORIDA TANGERINES ¹ Effective October 15, 1967 (32 F. R. 13500)

As amended February 13, 1968 (33 F. R. 2883)
and January 31, 1973 (37 F. R. 26418)

GRADES

Sec.

- 51.1810 U.S. Fancy.
- 51.1811 U.S. No. 1.
- 51.1812 U.S. No. 1 Bronze.
- 51.1813 U.S. No. 1 Russet.
- 51.1814 U.S. No. 2.
- 51.1815 U.S. No. 2 Russet.
- 51.1816 U.S. No. 3.

UNCLASSIFIED

- 51.1817 Unclassified.

TOLERANCES

- 51.1818 Tolerances.

STANDARD PACK

- 51.1819 Standard pack.

DEFINITIONS

- 51.1820 Mature.
- 51.1821 Firm.
- 51.1822 Well formed.
- 51.1823 Damage.
- 51.1824 Highly colored.
- 51.1825 Discoloration.
- 51.1826 Well colored.
- 51.1827 Fairly well colored.
- 51.1828 Fairly firm.
- 51.1829 Fairly well formed.
- 51.1830 Serious damage.
- 51.1831 Reasonably well colored.
- 51.1832 Very serious damage.
- 51.1833 Diameter.
- 51.1834 Classification of defects.

VISUAL AID

- 51.1835 Visual Aid.

AUTHORITY: The provisions of this subpart issued under secs. 203, 205, 60 Stat. 1087, as amended, 1090 as amended; 7 U.S.C. 1622, 1624.

GRADES

- § 51.1810 U.S. Fancy.

"U.S. Fancy" consists of tangerines which meet the following requirements:

- (a) Basic requirements:

- (1) Discoloration:

(i) Not more than one-tenth of the surface, in the aggregate, may be affected by discoloration. (See § 51.1825.)

- (2) Firm;
- (3) Highly colored;
- (4) Mature; and,
- (5) Well formed.

¹ Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act or with applicable State laws and regulations.

- (b) Free from:

- (1) Bruises;
- (2) Caked melanose;
- (3) Decay;
- (4) Unhealed skin-breaks; and,
- (5) Wormy fruit.
- (c) Free from damage caused by:
- (1) Ammoniation;
- (2) Buckskin;
- (3) Creasing;
- (4) Dirt or other foreign material;
- (5) Dryness or mushy condition;
- (6) Disease;
- (7) Green spots;
- (8) Hail;
- (9) Insects;
- (10) Oil spots;
- (11) Scab;
- (12) Scale;
- (13) Scars;
- (14) Skin breakdown;
- (15) Sprayburn;
- (16) Sunburn;
- (17) Unsightly discoloration; and,
- (18) Other means.
- (d) For tolerances see § 51.1818.

- § 51.1811 U.S. No. 1.

"U.S. No. 1" consists of tangerines which meet the following requirements:

- (a) Basic requirements:

- (1) Discoloration:

(i) Not more than one-third of the surface, in the aggregate, may be affected by discoloration. (See § 51.1825.)

- (2) Fairly well colored;
- (3) Firm;
- (4) Mature; and,
- (5) Well formed.
- (b) Free from:
- (1) Bruises;
- (2) Decay;
- (3) Unhealed skin-breaks; and,
- (4) Wormy fruit.
- (c) Free from damage caused by:
- (1) Ammoniation;
- (2) Buckskin;
- (3) Caked melanose;
- (4) Creasing;
- (5) Dirt or other foreign material;
- (6) Disease;
- (7) Dryness or mushy condition;
- (8) Green spots;
- (9) Hail;
- (10) Insects;

- (11) Oil spots;
- (12) Scab;
- (13) Scale;
- (14) Scars;
- (15) Skin breakdown;
- (16) Sprayburn;
- (17) Sunburn;
- (18) Unsightly discoloration; and,
- (19) Other means.

(d) For tolerances see § 51.1818.

§ 51.1812 U.S. No. 1 Bronze.

The requirements for this grade are the same as for U.S. No. 1 except that all fruit must show some discoloration. Not less than the number of fruits required in § 51.1818, Tables I and II, shall have more than one-third of their surface, in the aggregate, affected by discoloration. The predominating discoloration on these fruits shall be of rust mite type.

(a) For tolerances see § 51.1818.

§ 51.1813 U.S. No. 1 Russet.

The requirements for this grade are the same as for U.S. No. 1 except that not less than the number of fruits required in § 51.1818, Tables I and II, shall have more than one-third of their surface, in the aggregate, affected by any type of discoloration.

(a) For tolerances see § 51.1818.

§ 51.1814 U.S. No. 2.

"U.S. No. 2" consists of tangerines which meet the following requirements:

(a) Basic requirements:

(1) Discoloration:

(i) Not more than one-half of the surface, in the aggregate, may be affected by discoloration. (See § 51.1825.)

(2) Fairly firm;

(3) Fairly well formed;

(4) Mature; and,

(5) Reasonably well colored.

(b) Free from:

(1) Bruises;

(2) Decay;

(3) Unhealed skin-breaks; and,

(4) Wormy fruit.

(c) Free from serious damage caused by:

(1) Ammoniation;

(2) Buckskin;

(3) Caked melanose;

(4) Creasing;

(5) Dirt or other foreign material;

(6) Disease;

(7) Dryness or mushy condition;

(8) Green spots;

(9) Hail;

(10) Insects;

(11) Oil spots;

(12) Scab;

(13) Scale;

(14) Scars;

(15) Skin breakdown;

(16) Sprayburn;

(17) Sunburn;

(18) Unsightly discoloration; and,

(19) Other means.

(d) For tolerances see § 51.1818.

§ 51.1815 U.S. No. 2 Russet.

The requirements for this grade are the same as for U.S. No. 2 except that not less than the number of fruits required in § 51.1818, Tables I and II, shall have more than one-half of their surface, in the aggregate, affected by discoloration.

(a) For tolerances see § 51.1818.

§ 51.1816 U.S. No. 3.

"U.S. No. 3" consists of tangerines which meet the following requirements:

(a) Basic requirements:

(1) Mature;

(2) Not flabby; and,

(3) Not seriously lumpy.

(b) Free from:

(1) Decay;

(2) Unhealed skin-breaks; and,

(3) Wormy fruit.

(c) Free from very serious damage caused by:

(1) Ammoniation;

(2) Bruises;

(3) Caked melanose;

(4) Creasing;

(5) Dirt or other foreign material;

(6) Disease;

(7) Dryness or mushy condition;

(8) Hail;

(9) Insects;

(10) Scab;

(11) Scale;

(12) Scars;

(13) Skin breakdown;

(14) Sprayburn;

(15) Sunburn;

(16) Unsightly discoloration; and,

(17) Other means.

(d) For tolerances see § 51.1818.

UNCLASSIFIED

§ 51.1817 Unclassified.

"Unclassified" consists of tangerines which have not been classified in accordance with any of the foregoing grades. The term "unclassified" is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

TOLERANCES

§ 51.1813 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, based on sample inspection, the number of defective or off-size specimens in the individual sample, and the number of defective or off-size specimens in the lot, shall be within the limitations specified in Tables I and II. No tolerance shall apply to wormy fruit.

TABLE I—SHIPPING POINT ¹

(a) FOR 1 THROUGH 20 SAMPLES

Factor	Grades	AL ¹	Number of 50-count samples ²																			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
			Acceptance numbers ⁴ (maximum permitted)																			
Decay-----	U.S. Fancy----- U.S. No. 1----- U.S. No. 2-----	1	0	1	1	1	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5	5
			0	1	2	2	2	3	4	4	4	5	5	5	6	6	6	6	7	7	7	7
			0	1	2	2	2	3	4	4	4	5	5	5	6	6	6	6	7	7	7	7
Very serious damage including decay.	U.S. Fancy----- U.S. No. 1----- U.S. No. 2-----	6	4	6	9	11	14	16	18	20	22	24	26	28	30	33	35	37	39	41	43	45
			4	6	9	11	14	16	18	20	22	24	26	28	30	33	35	37	39	41	43	45
			4	6	9	11	14	16	18	20	22	24	26	28	30	33	35	37	39	41	43	45
Total defects including decay and very serious damage	All-----	5	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
			7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
			7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
Off-size-----	U.S. Fancy----- U.S. No. 1----- U.S. No. 2-----	10	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
			7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
			7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94
Discoloration-----	Serious damage by unsightly discoloration.	2	1	2	2	3	4	4	5	5	5	6	7	7	8	8	8	9	9	10	10	11
			1	2	2	3	4	4	5	5	5	6	7	7	8	8	8	9	9	10	10	11
			1	2	2	3	4	4	5	5	5	6	7	7	8	8	8	9	9	10	10	11
	U.S. No. 1 Bronze. U.S. No. 1 Russet.	11	15	32	51	69	88	106	125	144	162	182	201	220	240	259	278	297	317	336	355	374
			15	32	51	69	88	106	125	144	162	182	201	220	240	259	278	297	317	336	355	374
			15	32	51	69	88	106	125	144	162	182	201	220	240	259	278	297	317	336	355	374
	U.S. No. 2 Russet.	1	3	5	12	18	25	29	34	40	45	51	56	62	68	74	79	85	91	97	102	108
			3	5	12	18	25	29	34	40	45	51	56	62	68	74	79	85	91	97	102	108
			3	5	12	18	25	29	34	40	45	51	56	62	68	74	79	85	91	97	102	108

TABLE I—SHIPPING POINT 1—Continued

(b) FOR 21 THROUGH 40 SAMPLES

Factor	Grades	AL ^a	Number of 50-count samples ^b																			
			21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
			Acceptance numbers ^c (maximum permitted)																			
Decay.....	U.S. Fancy..... U.S. No. 1..... U.S. No. 2.....	1		6	6		6	5		7	7	7	7	7	7	8	8		8	8		
	U.S. No. 3.....																					
	U.S. No. 1..... U.S. No. 2.....			8	8	8	9	9	9	9	10	10	10	11	11	11	11	12	12	12	12	13
Very serious damage including decay.	U.S. Fancy..... U.S. No. 1..... U.S. No. 2.....	6	47	49	51	53	54	56	58	60	62	64	66	68	70	72	74	76	78	80	81	83
	U.S. No. 3.....																					
	U.S. No. 4.....																					
Total defects including decay and very serious damage.	All.....	8	98	103	107	111	116	120	124	129	133	137	141	146	150	154	159	163	167	171	176	180
	U.S. No. 1.....																					
	U.S. No. 2.....																					
Off-size.....	U.S. Fancy..... U.S. No. 1..... U.S. No. 2.....	10	98	103	107	111	116	120	124	129	133	137	141	146	150	154	159	163	167	171	176	180
	U.S. No. 3.....																					
	U.S. No. 4.....																					
Discoloration.....	U.S. Fancy..... U.S. No. 1..... U.S. No. 2.....	10	98	103	107	111	116	120	124	129	133	137	141	146	150	154	159	163	167	171	176	180
	U.S. No. 3.....																					
	U.S. No. 4.....																					
Serious damage by unsightly discoloration.	U.S. No. 1..... U.S. No. 2..... U.S. No. 3.....	2	11	12	12	12	13	13	14	14	15	15	15	16	16	17	17	17	18	18	19	19
	U.S. No. 4.....																					
	U.S. No. 5.....																					
U.S. No. 1 Bronze, U.S. No. 1 Russet.	U.S. No. 1..... U.S. No. 2..... U.S. No. 3.....	11	394	413	433	452	471	491	510	530	549	569	589	609	627	647	666	686	705	725	744	764
	U.S. No. 4.....																					
	U.S. No. 5.....																					
U.S. No. 2 Russet.	U.S. No. 2..... U.S. No. 3..... U.S. No. 4.....	1	114	119	125	131	137	143	149	155	161	166	172	178	184	190	196	202	208	214	220	226
	U.S. No. 5.....																					
	U.S. No. 6.....																					

^a Shipping point, as used in these standards, means the point of origin of the shipment in the production area or at port of loading for ship stores or overseas shipments, or in the case of shipments from outside the continental United States, the port of entry into the United States.^b Sample size—50 count.^c Acceptance number—Maximum or minimum number of defective or off-size fruit permitted.^d AL—Absolute limit permitted in individual 50-count sample.^e Preferred total number of samples for this acceptance number.

TABLE II.—EN ROUTE OR AT DESTINATION

Factor	Grades	AL ¹	Number of 50-count samples ²																					
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
			Acceptance numbers ³ (maximum permitted)																					
Decay	All	4	3	4	6	7	9	10	11	13	14	15	16	18	19	20	21	23	24	25	26	27		
Very serious damage other than decay.	U.S. Fancy	6	4	6	9	11	14	16	18	20	22	24	26	28	30	33	35	37	39	41	43	45		
	U.S. No. 1																							
	U.S. No. 2																							
Total defects including very serious damage other than decay.	All	8	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94		
Off-size		10	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94		
Discoloration	U.S. Fancy	10	7	12	17	22	27	32	36	41	45	50	54	59	63	68	72	76	81	85	90	94		
	U.S. No. 1																							
	U.S. No. 2																							
	Serious damage by unsightly discoloration.	11	1	2	2	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	U.S. No. 1	11	15	32	51	69	88	106	125	144	162	182	201	220	240	259	278	297	317	336	355	374	393	412
	Bronze																							
	U.S. No. 1																							
	Russet.																							
	U.S. No. 2	1	3	8	12	18	23	29	34	40	45	51	56	62	68	74	79	85	91	97	102	108	113	118
Russet.																								

¹ AL—Absolute limit permitted in individual 50-count sample.² Sample size—50 count.³ Acceptance number—Maximum or minimum number of defective or off-size fruit permitted.⁴ Preferred total number of samples for this acceptance number.

STANDARD PACK

§ 51.1819 Standard pack.

The tangerines in each container shall be packed in accordance with recognized methods. Each container shall be well filled and properly marked to indicate the size of the fruit. When the figures used to indicate size of fruit vary from the actual number of tangerines in the container, as in the case of fractional parts of boxes, the figures indicating size shall be followed by the letter "s" or the word "size," as, for example, "210's," or "210 size." Containers which are not so marked shall not be regarded as meeting requirements of "standard pack."

(a) Fruit in each container shall be of a size not less than the minimum diameters specified in Table III for the various packs. Packs other than those listed shall have a minimum diameter not less than specified for the nearest count.

TABLE III

Pack	Diameter in inches (minimum)
100 -----	2 ¹⁵ / ₁₆
120 -----	2 ¹¹ / ₁₆
150 -----	2 ⁹ / ₁₆
176 -----	2 ⁷ / ₁₆
210 -----	2 ⁵ / ₁₆
246 -----	2 ³ / ₁₆
294 -----	2

(b) In order to allow for variations incident to proper sizing, not more than the number of fruits permitted in § 51.1818, Tables I and II, are below the minimum size for the count as specified in Table III.

DEFINITIONS

§ 51.1820 Mature.

"Mature" shall have the same meaning currently assigned that term in sections 601.21 and 601.22 of the Florida Citrus Code of 1949, as amended (ch. 26492, Laws of Florida, 1951) or as the definition of such term may hereafter be amended.

§ 51.1821 Firm.

"Firm" means that the flesh is not soft and the fruit is not badly puffy and that the skin has not become materially separated from the flesh of the tangerine.

§ 51.1822 Well formed.

"Well formed" means that the fruit has the characteristic tangerine shape and is not deformed.

§ 51.1823 Damage.

"Damage" means any specific defect described in § 51.1834, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.1824 Highly colored.

"Highly colored" means that the ground color of each fruit is a deep tangerine color with practically no trace of yellow color.

§ 51.1825 Discoloration.

"Discoloration" means russetting of a light shade of golden brown caused by rust mite or other means. Lighter shades of discoloration caused by superficial scars or other means may be allowed on a greater area, or darker shades may be allowed on a lesser area, provided no discoloration caused by speck type melanose or other means may detract from the appearance of the fruit to a greater extent than the shade and amount of discoloration allowed in the grade.

§ 51.1826 Well colored.

"Well colored" means that a good yellow or better ground color predominates over the green color on the entire fruit surface with no distinct green color present, and that some portion of the surface has a reddish tangerine blush.

§ 51.1827 Fairly well colored.

"Fairly well colored" means that the surface of the fruit may have green color which does not exceed the aggregate area of a circle 1¼ inches in diameter and that the remainder of the surface has a yellow or better ground color with some portion of the surface showing reddish tangerine blush.

§ 51.1828 Fairly firm.

"Fairly firm" means that the flesh may be slightly soft but is not bruised or badly puffy, and that the skin has not become seriously separated from the flesh of the tangerine.

§ 51.1829 Fairly well formed.

"Fairly well formed" means that the fruit may not have the shape characteristic of the variety but that it is not badly deformed.

§ 51.1830 Serious damage.

"Serious damage" means any specific defect described in § 51.1834, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.1831 Reasonably well colored.

"Reasonably well colored" means that a good yellow or reddish tangerine color shall predominate over the green color on at least one-half of the fruit surface in the aggregate, and that each fruit shall show practically no lemon color.

§ 51.1832 Very serious damage.

"Very serious damage" means any specific defect described in § 51.1834, Table IV; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which very seriously detracts from the appearance, or the edible or marketing quality of the fruit.

§ 51.1833 Diameter.

"Diameter" means the greatest dimension measured at right angles to a line from stem to blossom end.

51.1834 Classification of defects.

TABLE IV

Factor	Damage	Serious damage	Very serious damage
Ammoniation.....	Not occurring as light speck type, or detracts more than discoloration permitted in the grade.	Scars are cracked or dark and aggregating more than $\frac{3}{8}$ inch in diameter on a 176 size tangerine.	Aggregating more than 25 percent of the surface.
Buckskin.....	Aggregating more than a circle $\frac{3}{4}$ inch in diameter on a 176 size tangerine.	Aggregating more than 25 percent of the surface.	Aggregating more than 50 percent of the surface.
Caked melanose...	Aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 176 size tangerine.	Aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 176 size tangerine.	Aggregating more than 25 percent of the surface.
Creasing.....	Materially weakens the skin, or extends over more than one-third of the surface.	Seriously weakens the skin, or extends over more than one-half of the surface.	Very seriously weakens the skin, or is distributed over practically the entire surface.
Dryness or mushy condition.	Affecting all segments more than $\frac{1}{8}$ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than $\frac{1}{4}$ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.	Affecting all segments more than $\frac{1}{2}$ inch at stem end, or the equivalent of this amount, by volume, when occurring in other portions of the fruit.
Green spots.....	More than 10 spots caused by scale, each spot equivalent to the area of a circle $\frac{1}{4}$ inch in diameter on a 176 size tangerine.	More than 25 spots caused by scale, each spot equivalent to the area of a circle $\frac{1}{4}$ inch in diameter on a 176 size tangerine.	
Hall.....	Not well healed, or aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 176 size tangerine.	Not well healed, or aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 176 size tangerine.	Not well healed, or aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 176 size tangerine.
Oil spots.....	More than 5 spots, or aggregating more than a circle $\frac{1}{2}$ inch in diameter on a 176 size tangerine.	More than 10 spots, or aggregating more than a circle $\frac{3}{4}$ inch in diameter on a 176 size tangerine.	
Scab.....	Materially detracts from the shape or texture, or aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 176 size tangerine.	Seriously detracts from the shape or texture, or aggregating more than a circle $\frac{1}{2}$ inch in diameter on a 176 size tangerine.	Aggregating more than 25 percent of the surface.
Scale.....	Aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 176 size tangerine.	Aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 176 size tangerine.	Aggregating more than 25 percent of the surface.
Scars.....	Not smooth, or causing any noticeable depression, or detracts from appearance more than the amount of discoloration permitted in the grade.	Not fairly smooth, or causing any materially depressed area, or detracts from appearance more than the amount of discoloration permitted in the grade.	Deep, rough, or unsightly that appearance is very seriously affected.
Skin breakdown...	Aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 176 size tangerine.	Aggregating more than a circle $\frac{3}{8}$ inch in diameter on a 176 size tangerine.	Aggregating more than 25 percent of the surface.
Sprayburn.....	Skin is hard and aggregating more than a circle $\frac{1}{4}$ inch in diameter on a 176 size tangerine.	Skin is hard and aggregating more than a circle $\frac{1}{4}$ inches in diameter on a 176 size tangerine.	Aggregating more than 25 percent of the surface.
Sunburn.....	Skin is flattened, dry, darkened, or hard and the affected area exceeds 25 percent of the surface.	Skin is hard and affects more than one-third of the surface.	Aggregating more than 50 percent of the surface.
Unsightly discoloration.	Color and pattern causes an unattractive appearance.	Color and pattern causes a distinctly unattractive appearance.	Very objectionable appearance caused by any means.

VISUAL AID

§ 51.1835 Visual Aid.

(a) USDA Visual Aid CIT-(FL)-L-1, consists of a booklet containing color reproductions of Florida tangerines illustrating certain grade requirements, namely shape, texture, firmness, color, varietal characteristics, and other defects as set forth in these standards. This visual aid may be examined in the Fruit and Vegetable Division, AMS, U.S. Department of Agriculture, South Building, Washington, D.C. 20250; in any field office of the Fresh Fruit and Vegetable Inspection Service; or upon request of any authorized inspector of such service. Duplicates of this visual aid may be purchased from the John Henry Co., Post Office Box 1410, Lansing, MI 48904.

The U.S. Standards for Grades of Florida Tangerines contained in this subpart shall become effective October 15, 1967, and will thereupon supersede the U.S. Standards for Grades of Florida Tangerines which have been in effect since September 15, 1960 (7 CFR 51.1810-51.1834).

Dated: September 20, 1967.

G. R. GRANGE,
Deputy Administrator,
Marketing Services.

[F.R. Doc. 67-11229; Filed, Sept. 26, 1967;
8:45 a.m.]

The printing of these standards incorporates an amendment to Table 2, effective February 13, 1968, and is amended by adding a new Section 51.1835, effective January 31, 1973.

FLORIDA TANGERINES

Basic Requirements:

SHAPE



Well formed.



Fairly well formed.

SHAPE



Misshapen.

TEXTURE



Not seriously lumpy.

FIRMNESS



Badly puffy.

COLOR

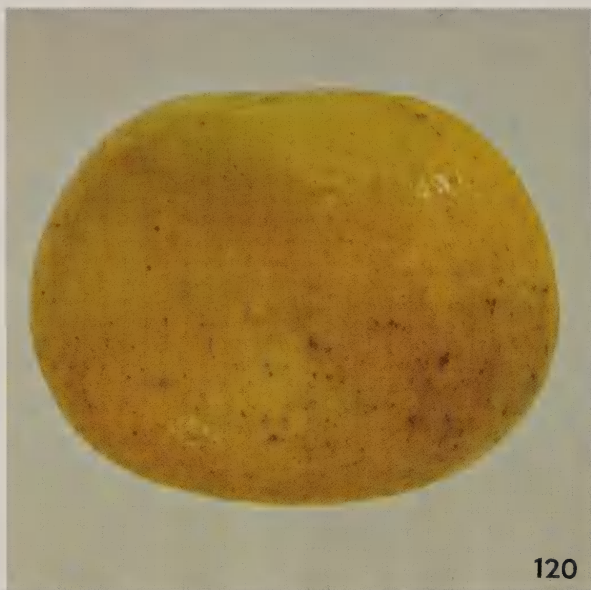


Fairly well colored.



Fairly well colored.

HONEY TANGERINE



ROBINSON



122

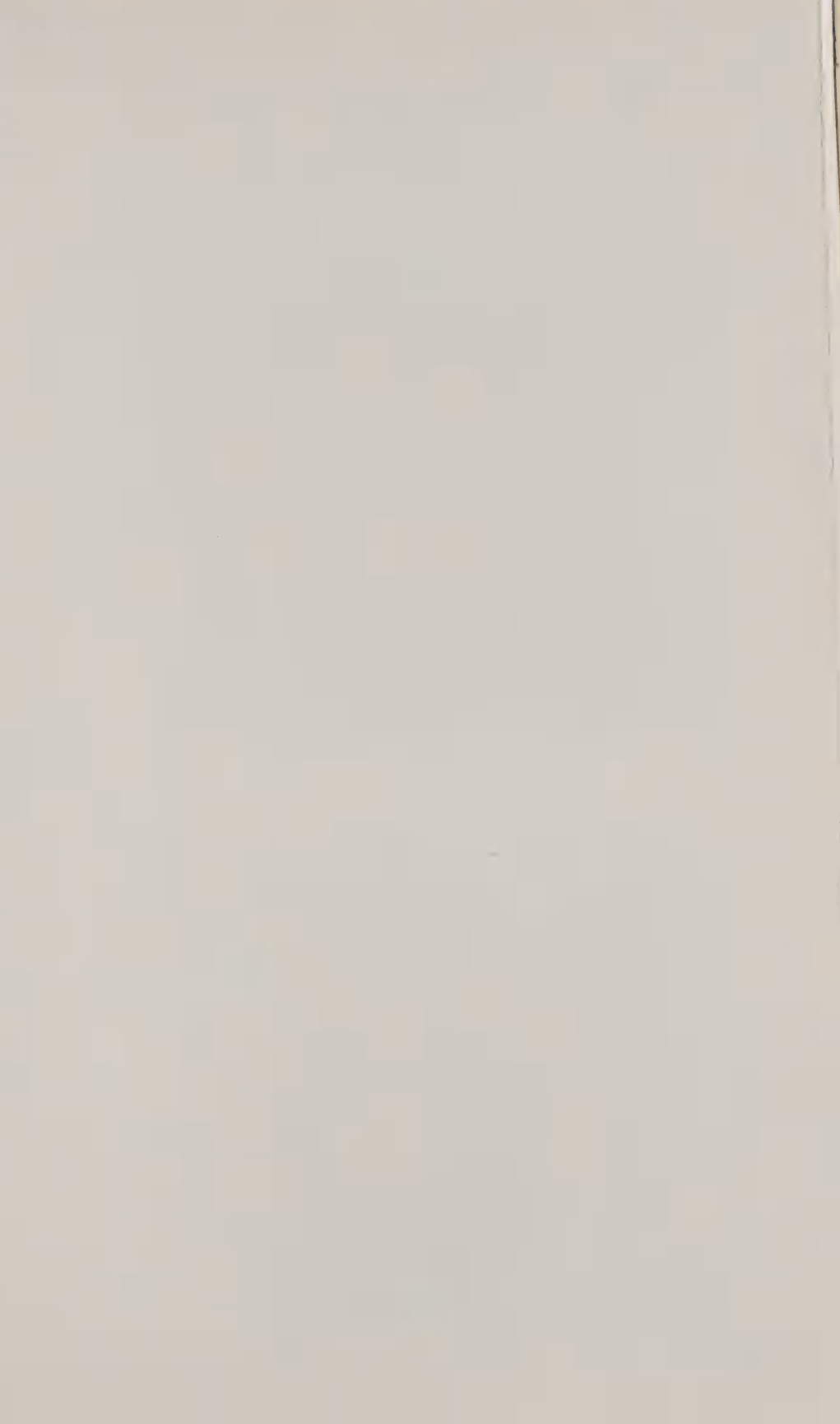


123

VARIETAL CHARACTERISTICS

DANCY





Classification of Defects:

BUCK SKIN

**U.S.
No. 2**



126

Maximum allowed.

GREEN SPOTS

**U.S.
No. 3**



127

SCALE

**U.S.
No. 2**



128

Red – maximum allowed.

**U.S.
No. 2**



129

Purple – maximum allowed.

OIL SPOTS

***U.S.
No. 1***



Maximum allowed.

SCARS

**U.S.
No. 1**



132

Maximum allowed.

**U.S.
No. 1**



133

Maximum allowed.

***U.S.
No. 1***



134

Maximum allowed.

***U.S.
No. 2***



135

Maximum allowed.

**U.S.
No. 2**



136

Maximum allowed.

**U.S.
No. 3**



137

SCARS (Continued)

**U.S.
No. 3**



138

SKIN BREAKDOWN

**U.S.
No. 2**



Maximum allowed.

**U.S.
No. 3**



SUNBURN

**U.S.
No. 2**



141

Maximum allowed.

(Fruit as above when cut.)

**U.S.
No. 2**



142

Maximum allowed.

UNSIGHTLY DISCOLORATION

**U.S.
No. 1**



Maximum allowed.

**U.S.
No. 2**



Maximum allowed.

HAIL

**U.S.
No. 2**



Maximum allowed.

CLIPPER CUT



Cut unhealed.